INFLUENCE OF PRINCIPALS' INSTRUCTIONAL LEADERSHIP PRACTICES ON ACADEMIC ENVIRONMENT IN PUBLIC DAY SECONDARY SCHOOLS IN KISII CENTRAL SUB-COUNTY, KISII COUNTY, KENYA.

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DECLARATION

This is my original work and has not been presented to any other university for any academic award.

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DEDICATION

This work is dedicated to my husband Denis Okerosi, children Daniel Okemwa and Emmanuel Kiarie, my late father Michael Kiarie, loving mother Veronica Wanja, and all my siblings.

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I wish to acknowledge the contribution of my supervisor; Dr. Jane Kembo and Dr. Stella Juma for their constructive criticism and guidance without which this work would not have materialized. I also wish to register my gratitude to all principals, teachers, and learners in sampled schools for providing relevant information that facilitated the completion of this study.

ABSTRACT

The purpose of this study was to investigate the influence of principals' instructional leadership practices on school academic environment in Public day secondary schools in Kisii Central, Kisii County. The objectives of the study were to: determine the influence of setting annual academic goals on school academic environment, examine the influence of monitoring instruction on school academic environment, find out the influence of principals' promotion of teachers' professional development on school academic environments, find out the influence of principals' promotion of collaboration on school academic environment, establish principals' influence on utilization of available resources on school academic environment. The study adopted cross-sectional survey research design. Twelve schools were selected randomly from 25 public day secondary schools in Kisii Central sub-county. The sample consisted of 12 principals selected through purposive sampling, 72 teachers and 322 learners selected using proportionate random sampling. Interview schedules, questionnaires, observation schedules and document analysis guides were used to collect data. Reliability was established through the test-retest method. Data were analyzed using frequencies, percentages, standard deviation and Chi-square at 0.05 level of significance. The study found that: Goal setting enhanced teaching and learning environment mainly by influencing syllabi coverage while monitoring instruction enhanced teachers' class attendance. Teachers professional development had the least influence on school's academic environment as it was not needs-driven. Teacher collaboration promoted school-wide focus on teaching as teachers learnt from each other while utilization of resources created an enabling environment for teachers to issue homework and classwork to learners. The study concluded that: Goal setting was a common instructional leadership practice among the sampled principals however it was marred by lack of or inadequate communication to teachers and learners resulting in their failure to own and identify with the goal as revealed by the incongruence in stating schools' goals between different categories of respondents in the same school. Although the majority of teachers rated their principals as effective in monitoring instruction, the intended purpose is not realized as it is flawed by teachers' fear of the measures that the Teacher service commission may institute following unfavorable appraisal reports from lesson evaluation. There were disparities among schools in access to facilities such as laboratories, classes and libraries as provision of books was also not informed by current data provided by principals. The study recommended that principals should constantly refer to set goals to cultivate ownership and commitment by teachers and learners. Principals should design monitoring instruction in a way that their intentions are not construed to be punitive or influenced only by the existing Teachers service commission's policy rather than by the need to enhance teachers' professional growth and learning. The Ministry of education should use data provided by the principals in the supply of teaching-learning resources to schools. The study recommends further studies on: Other roles of principals that influence school academic environments, influence of distributed instructional leadership on teachers' perceptions of school environments and replication of this study in boarding schools, private schools in the Sub County and in other geographical regions.

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LIST OF ACRRONYMNS AND ABBREVIATIONS

KCPE	Kenya Certificate of Primary Education
KCSE	Kenya Certificate of Secondary Education
KNEC	Kenya National Examination Council
MOE	Ministry of Education
SPSS	Statistical Package for Social Sciences
TSC	Teachers Service Commission
TLAR	Teachers Lesson Attendance Registers
OECD	Organisation of Economic Co-operation Development

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Secondary school education in Kenya is aimed at assisting learners to acquire necessary knowledge, skills and attitudes (Sessional paper 1 of 2019) for both self as well as the nation's development. This further lays a firm foundation for entry into higher learning institutions. It is further considered an important gateway to the formal job market. Given the significance of secondary education, schools are expected to provide quality and relevant education to learners to enable them to compete favorably in the formal job market. As stakeholders demand better performance in national examinations from schools, instructional leadership becomes a central issue (Jawa, 2014). School leadership is essential for all schools to achieve the expected objectives.

Leadership is the process of influencing and facilitating others to do what needs to be done to take the organization to the next higher level (Bush, 2007; Yukl, 2002; 2006). In the school setting principals are required to influence teachers' and learners' actions towards the attainment of school mission, vision and goals. The school principals work with and through teachers to raise teaching and learning standards (Connelly & Schooley, 2013). They are expected to create an orderly environment that is focused on teaching and learning by inspiring teachers and learners to achieve shared annual academic goals.

School leadership is responsible for students' academic attainment. To enhance academic attainment for their schools, principals focus on the core role of improving teaching and learning (Usman, 2015). Principals animate the school and provide direction to teachers and learners through their leadership. According to Leithwood, et al. (2004) school leadership focuses on improving teaching and learning by defining school goals and creating a conducive environment. In collaboration with teachers and other stakeholders school leaders establish

structures that support students' learning and achievement (Zammit, et al., 2007). To be successful school principals must balance between management duties such as budgeting, facility maintenance, planning, staffing among other responsibilities with instructional leadership.

1.1.1 Instructional Leadership

Instructional leadership is the core of the principal's job (Connelly & Schooley, 2013). According to Carraway and Young (2014) instructional leadership focuses on head teachers' efforts to improve teaching and learning and eventually learners' academic performance. Managing teaching and learning is one of the many roles performed by principals (Bush, et al., 2010; De Matthews, 2014; Connelly & Schooley, 2013). To be effective as instructional leaders, school principals direct the teaching-learning process and also oversee the establishment of school routines and structures as well as garner and distribute resources to enhance students' academic attainment. School principals should not only secure material resources to support instruction but should also ensure that school buildings, furniture and other resources are properly maintained and utilized optimally to enhance learning.

A principal's role as an instructional leader involves setting direction, developing the teachers to be effective in teaching and making the school work. Instructional leadership practices influence classroom practices adopted by teachers (Blase & Blasé, 2004; Leithwood et al., 2004). According to Dorfman and House (2004), instructional leadership is task-oriented as it focuses on improving students' attainment by improving teachers' classroom practices.

Globally, instructional leadership is considered key in influencing students learning and achievement. In Greece, time constraints and failure to hold professional conversations with teachers were found to hinder instructional leadership (Brolund, 2016). The instructional leader also engages in modeling expected instructional practices for teachers and monitoring teachers'

instructional practices (Leithwood et al., 2004: Brolound, 2016). Instructional leaders guide, direct and control matters relating to teaching and learning. To do so they supervise teachers' work and offer support through observation and feedback. Instructional leaders are expected to enhance teachers' work by inspiring them to adopt appropriate pedagogy, plan for instruction, utilize allocated teaching-learning time and resources effectively, master subject content as well as provide timely feedback to learners.

Principals perform the functions related to instructional leadership daily coupled with other administrative school work. Directing the day-to-day activities of the school towards the attainment of school mission is the main role of every instructional leader. To improve students' academic attainment a school requires the principal to play the role of an instructional leader by ensuring the quality of teaching and learning while balancing the needs of the teachers and students (Mafuwane, 2011; Purinton, 2012).

In China Lai and Cheung (2013) observed that there exists a relationship between instructional leadership and students' outcomes. Instructional leadership can make a difference in students learning and consequently in their academic attainment (Alig-Mielcareck (2003) by ensuring a school-wide focus on instruction. Management of instruction forms the bulk of an instructional leader's work as it determines whether the school achieves its mission or not. Management of instruction entails supervision and evaluation of instruction, coordinating the curriculum and monitoring students' progress (Moonsammy-Koopasammy, 2013). Supervision of the teaching-learning process informs the principal about what is going on in the classroom to help in making informed decisions on how this can be improved.

Citing Bush and Oduro, Masuku (2011) observes that many school leaders, especially in Africa, work in poorly equipped schools. Despite the inadequacy of resources, schools are expected to deliver on their mandate. It is, however, important to note that what influences teaching and

learning is not mere provision of teaching-learning resources, but effective use of available resources (Ndaita, 2013). Instructional leadership comes in handy in influencing the utilization of available resources to develop a conducive and productive environment for teachers and learners.

1.1.2 School Academic Environment

In the glossary of education reforms, Ravitch (2010) looks at the school environment as the physical location, context, and cultures in which children learn. Further, it includes how people treat each other within the school as well as how teachers organize the school to facilitate teaching and learning. School environment includes factors within the school that influence its effectiveness (Saitis, 2008). The factors include facilities, resources, pedagogical methods, and support systems. School environments play a critical role in shaping how students learn.

A school's academic environment focuses on excellence in teaching and learning and communicates this to teachers and learners (Blum, 2005). It is, however, important to note that academic success can only take place if teachers and learners feel connected to their school. Additionally, teachers who feel that school leadership respects and trusts them tend to be committed to their work and experience professional fulfillment. When teachers and learners perceive the school environment as conducive for teaching and learning respectively they become more productive. According to Harvey and Holland (2011) a school principal should create a supportive school academic environment not just for teachers but for students to learn. Supportive school environments cultivate students' sense of belonging, acceptable behavior, school attendance and academic achievement. A school environment is expected to help learners connect with other learners, teachers and what they are taught. Learners who perceive their school environment to be caring are more engaged academically and less likely to be undisciplined (Schaps, 2005).

In Chicago schools, Buckley, Scheneider and Shaving (2004) observed that a teacher's decision to remain in a certain school was seen to be influenced by the quality of the school environment. A favorable school environment influences teachers' productivity and retention. Further, it is observed that the longevity of teachers' stay in a school provides stability for the school. A longer stay in a school helps teachers to connect with school, work and learners which may enhance their classroom practice, learning and eventually learners' academic attainment.

Schools require trained and committed teachers working in a supportive environment to be effective in facilitating teaching and learning process. The nature and the quality of school environment affect teachers' attitudes, behavior and performance (Uline & Tschahnen-Moran, 2008). Teachers' favorable attitude and behavior would enhance their effectiveness in teaching which in turn would influence learners' perceptions of the environment, how they learn (Groves & Welsh, 2010) and their academic attainment.

According to Usaini, Abubakar and Bichi (2015) school environment is positively related to academic performance in Malaysia. A conducive school environment makes teachers and learners feel connected to their school. Such an environment promotes high productivity for teachers and high academic achievements for the learners. As such a school environment requires careful planning to optimize experiences that support learning.

In Nigeria Nwachukwu and Anina (2014) reveal that unfavorable school environments affect teachers' performance adversely. Furthermore, the unfavourable school environment is believed to arise from ineffective leadership which deters teachers' motivation to teach, students' discipline and eventually learners' academic performance. This is further emphasized by Masuku (2011) who posits that a favorable school environment promotes a productive and satisfying working experience for teachers and students. A favorable school environment is not only important for teachers and learners within the school but also ensures that new teachers

joining the school adopt teaching practices practiced in the school. Additionally, a favorable school environment provides the required stimulus that promotes learning (Arul & Vimala, 2012).

The principal's functions consist of direct and indirect activities that help create a positive or negative environment. The functions entail promoting a positive school academic environment and ensuring that all activities in the school are directed towards attainment of the school academic goal. Largely the principal should promote a positive academic environment for the learner by influencing teaching. Further, the principal should supervise utilization of instructional time and other resources, maintain high visibility, provide opportunity for teachers' professional development, promote academic standards and provide incentives for learning (Sessional Paper 1 of 2019).

According to Alig-Mielcareck (2003) instructional leaders can influence students' and teachers' attitudes through the creation of a reward structure that reinforces academic achievement and productive efforts by setting, communicating and sustaining clear, explicit standards that demonstrate what the school expects from students. Effective leadership influences the academic environment for the teacher which translates into effective learning for the learners. The role of the instructional leader on the school environment involves transforming the school into a learning environment (Ndaita, 2013).

The Ministry of Education in Kenya requires instructional leaders to enhance the quality of education offered in schools and consequently impact students' academic performance (MOE, 1988). This is done by creating a conducive environment in the school. School heads are expected to garner adequate educational facilities that can arouse interest in the students and motivate them to work hard. According to Nyamongo et al., (2014) school conditions contribute more to the difference in learning between highly and lowly rated schools than other factors

outside the school. Further, they note that inadequate educational facilities and resources affect students' academic performance. However, even with such challenges, academic performance can be enhanced with improved supervision. This indicates that leadership is critical in creating a school environment that promotes teaching and learning.

1.1.3 Public Day Secondary Schools in Kenya

The 8-4-4 Education System, which is currently being phased out takes eight years of primary education, four years of secondary and four years of post-secondary education. Secondary education in Kenya targets children between the ages of fourteen (14) to seventeen (17) years old (Sessional Paper 1, of 2019. This stage of life is marked by physical, mental and social changes. It is also the time that adolescents' personalities develop. This stage impacts educational outcomes (Martin & Steinbeck,2017). As such, school environments should be designed carefully as they not only affect academic development of students but also physical, mental, emotional as well as social development of the adolescents (Marin & Brown, 2008). Schools should provide stability by providing conducive environments where students can feel part of the school so that they learn even as they undergo transition from childhood to adulthood.

A public school is one that is maintained out of public funds. The Kenya Basic Education Act 14 of 2013 categorizes public secondary schools into four: national, extra county, county and sub-county schools. Admission into the different categories is based on merit with students at the apex of the performance pyramid at the primary level in Kenya Certificate of Primary Education (K.C.P.E) being selected to join national schools. Extra county schools select the second-best performing lot while average students are selected to join county schools. Students at the bottom of the performance pyramid are selected to join sub-county schools which are mostly day schools that draw their students from the host sub-county. Students in day schools

receive instruction during the day and return home afterward. These students may also include high achievers who find themselves in these schools due to socio-economic factors.

The majority of day secondary schools in Kenya were started to serve students from urban areas (Jagero, 2014). However, with the introduction of Free Primary Education in 2003 and Free Secondary Education in 2008 there was an influx in enrolment requiring expansion of access to secondary schools. Public secondary schools increased from 6,566 in the year 2008 to 7,308 in 2009 and enrolment rose to 1.3 in 2011 from 1.18 in 2008 (MOE,2012). Sessional Paper 1 of 2019 indicates that secondary school enrolment in 2017 was 2.8 million and the number of secondary schools had risen to 10665 in the same year. Currently, there are 6,858 public sub-county secondary schools in the country (Oduor, 2015).

1.1.4 Public Day Secondary Schools in Kisii Central Sub-County

Kisii County is one of the forty-seven (47) counties in Kenya. Kisii Central Sub-County is one of the nine sub-counties in Kisii County. There are 25 public day secondary schools out of the 45 secondary schools in the sub-county (MOE Kisii County, 2018). It is evident that the majority of the students in this Sub-county go to public day secondary schools because more than half (55.6%) of secondary schools in Kisii Central Sub-County are day schools**.**

The mean grade at Kenya Certificate for Secondary Education (K.C.S.E) for public day secondary schools in Kisii Central Sub-County for the past five years has been below the minimum requirement for direct entry into university or tertiary college as shown in Table 1.1.

Table 1. 1 Mean Grades for Public Day Secondary Schools in Kisii Central Sub-County

Year	Mean
2015	2.7
2016	2.8
2017	2.8
2018	2.7
2019	3.0

Source: Ministry of Education, Kisii Central Sub-County (2019)

Low academic achievement may be seen as failing to meet the minimum requirement for direct entry into university which currently stands at 7.0 points (C+) or middle-level colleges which is higher than the mean grade for the students in most public day secondary schools in Kisii Central Sub-County whose mean grade ranges between D minus (D-) and D plain (D) as depicted in Table 1.1. In Kenya, performance in K.C.S.E is considered to be the doorway to institutions of higher learning and by extension, the formal job market. This implies that many of the students from public day secondary schools in Kisii Central Sub-County are locked out of such institutions and consequently the formal job market.

1.2 Statement of the Problem

The low academic achievement in public day secondary schools in Kisii Central Sub-county raises questions about the kind of academic environments in which learning takes place. Instructional leaders are expected to influence the academic environment for schools to attain academic success. Academic success at secondary school level is measured in terms of performance in Kenya Certificate of Secondary Education (K.C.S.E). Performance in K.C.S.E is considered an important criterion for selection into institutions of higher learning and the formal job market.

The performance of public day secondary schools in Kisii Central Sub-County has not been satisfactory to enable students from such schools to secure placement opportunities in institutions of higher learning for the last five years as depicted in Table 1.1. Students' academic performance is considered an important indicator of a school's success.

In Kenya, a day secondary school student spends at least eight hours within the school environment on a normal school day. The time spent in school may be the only time that a student in a day school gets to study. This implies that much of the learning for a student in a day school takes place within the school environment. School environment plays a critical role in shaping how students learn. As such school environment should be conducive to ensure optimal learning for the students. It is worth noting that a conducive school environment is important in promoting learning and eventually good performance. Principals as instructional leaders influence students' performance largely by influencing the school environment.

1.3 Purpose of the Study

The purpose of the study was to determine the influence of instructional leadership practices on academic environments in public day secondary schools in Kisii Central Sub-County.

1.3.1 Research Objectives

The study intended to:

i. Determine the influence of setting annual academic goals on school academic environments.
ii. Examine the influence of monitoring instruction on school academic environments.
iii. Find out the influence of promotion of teachers' professional development on school academic environments.
iv. Find out the influence of promotion of collaboration on school academic environments.

v. Establish the influence of utilization of available resources on school academic environments.

1.3.2 Research Hypotheses

The following research hypotheses were tested:

$H_0$1: There is no significant association between setting annual academic goals and school academic environment.

$H_0$2: There is no significant association between monitoring instruction and school academic environment.

$H_0$3: There is no significant association between promotion of teachers' professional development and school academic environment

$H_0$4: There is no significant association between promotion of collaboration and school academic environment.

$H_0$5: There is no significant association between utilization of available resources and school academic environment.

1.4 Significance of the Study

The researcher hopes that the findings of the study will provide valuable information to various stakeholders as discussed below:

The study findings may assist principals to examine their instructional leadership practices to identify their strengths and weaknesses and work on the aspects that require redress. The study highlights different aspects of school academic environment and points out areas that require improvement to enhance learners' academic performance. Additionally, this may prompt principals to adopt instructional leadership strategies that enable them to improve teaching and learning in their schools and subsequently academic performance.

The findings may provide feedback to the Ministry of Education by exposing challenges faced by instructional leaders in public day secondary schools in creating productive academic environments. These may be used to develop and implement strategies for enhancing instructional leadership and school environments.

Finally, the study provides in-depth insight into principals' instructional leadership practices and their influence on school academic environments. It may serve as a springboard for other researchers interested in investigating the influence of instructional leadership practices on school academic environments in other parts of the country and other types of schools other than public day secondary schools.

1.5 Scope of the Study

The study focused on the influence of principals' instructional leadership practices on school academic environment in public day secondary schools in Kisii Central Sub-County. The study addressed five elements of instructional leadership namely: promotion of teachers' professional development, collaboration, setting, communicating and sustaining annual academic school goals, garnering and distributing teaching-learning resources and monitoring of instruction.

It focused on how the principal who plays the role of the lead instructional leader in their school influences teachers to utilize instructional time, resources, skills and knowledge to enhance learning. It sought to establish if the principals supported teachers' professional growth opportunities by promoting collaboration, monitoring instruction, provision of timely feedback on teachers' work performance and organizing in-house seminars and workshops. The study sought to establish whether principals maintain high visibility in school and encourage learners to maintain a conducive environment in the school by maintaining high order discipline. The study collected data from head teachers, teachers and learners in selected public day secondary schools in Kisii Central Sub-County in the year 2019.

1.6 Limitations of the Study

The study was limited to 25 public day secondary schools out of the 45 secondary schools in Kisii Central Sub-County thus the findings of the study may not be generalized to boarding and private schools. Further, the target population was drawn from a peri-urban sub-county. As such the findings may not be applied to schools operating in different contexts. To enhance the generalizability of the findings to similar schools in contexts similar to the locale of the study the researcher employed probability sampling to select the sampling units: schools.

The study adopted cross-sectional survey research design which collects data from different sample units in one snapshot, thus, respondents' responses may have been based on their most recent experiences. Secondary and probing questions were used in conjunction with primary questions in questionnaires and face-to-face interviews to enhance the validity of the instruments. Additionally, the study used observations and document analysis that provided complementary data which were corroborated with data collected through teachers' and learners' questionnaires as well as interviews. The study employed both methodological and source triangulation to enhance the validity of the data collected.

The study relied on respondents' honesty in responding to questionnaires and interview questions. To promote truthfulness in their responses the researcher assured respondents of anonymity of responses. The researchers instructed respondents not to indicate their names on the questionnaires and used codes to identify their schools. Additionally, the researcher used designation to refer to respondents rather than their names in the written report.

School environment may be described as caring, safe and structured, academic and participatory environments. This study concentrated on academic environment which focuses on teaching and learning and is thought to influence academic achievement. Other types of

school environments have only been referred to as those that help enhance academic environment.

1.7 Assumptions for the Study

The study made the following assumptions:

1. The study assumed that the respondents co-operated and provided the information required for the study. The study relied largely on self-report questionnaires and interview schedules thus respondents' cooperation and honesty were deemed important.
2. The principals understood and practiced their roles as instructional leaders in schools and adopted instructional leadership practices that were expected to influence teaching and learning.
3. The study assumed that instructional leadership practices influence school academic environments.
4. Teachers and learners selected for the study understood and articulated instructional leadership practices exercised by their principals.

1.8 Theoretical Framework

The study was guided by the instructional leadership model advanced by Day and Sammon (2014) which has five components namely: establishing goals and expectations, resourcing strategically, planning, and co-ordination of teaching and curriculum, promoting and participating in teacher learning and development, and creating orderly environment.

Using relevant data, the principal should collaborate with teachers and learners in setting clear and realistic academic goals annually (Aligmiel-Carek, 2003). Principals should also communicate constantly their expectations for teachers and learners. Even though schools have different departments, each with different objectives, the principal should ensure that all efforts in the school are directed towards the attainment of set school goals.

Instructional leaders should source teachers and material resources based on school needs. Teachers should also be deployed to teach subjects that they have specialized knowledge in and should be provided with continuous professional development as may be necessary. To enhance school environment, the principal should ensure that resources are aligned to pedagogical purposes and priorities.

The instructional leader should constantly supervise instruction to ensure that teaching is in line with the school curriculum. This involves monitoring teaching through formal and impromptu visits to class. Principals should observe teachers during lessons and ensure that lessons objectives are in line with school academic goals. According to Wanzare (2012) instructional leaders should adopt teacher-friendly methods of supervision that prompt teachers to identify their areas of weaknesses and rectify them. The instructional leader should help teachers adopt practices that promote learning and help them develop effective pedagogy that promotes learning opportunities for the learner, and, finally the set mean grade. Impromptu visits to classrooms, walk-throughs and lesson observation enhance principals' visibility in school and may also show support to teachers and learners.

Principals should promote collaboration among teachers to enhance teachers' work performance by creating physical spaces and time for teachers to engage in collegial discussion on teaching. To do so they need to organize schedules and physical spaces that support teachers' collaboration. Additionally, they should provide oversight on coordination of teaching programmes in their schools.

The instructional leader should cultivate teacher learning and development (Day & Sammons, 2014). Instructional leaders should provide useful advice about how to solve teaching problems. Identification of teaching problems may be done through monitoring of instruction especially by observing teachers in class. This could inform principals about training programmes and

facilitate teachers to attend such forums outside the school. Additionally, the principals can cultivate teachers' professional development through mentoring, peer observation and coaching (Lee & Kim, 2012). Instructional leaders should provide useful advice on how to solve teaching problems and make students' achievement and well-being the collective responsibility of teachers.

Instructional leaders are expected to create orderly and supportive environments by protecting teaching-learning time through minimizing disruptions and indiscipline, ensuring that teachers plan for instruction, ensuring class attendance by teachers and learners and the time allocated for each subject is utilized appropriately. Principals should also develop policies and standards that are reflected in the behavior of all teachers in the school. The principal should institute and communicate school rules that spell out the expected behavior for learners. Principals should enhance the school environment to harness learners' potential and to add value in their academic lives.

Although school boundaries are permeable, entry into the school should be controlled from the natural access points and the school physical space secured with a perimeter fence to minimize disruptions during classes and unauthorized access. This enhances the physical school environment by blocking entry of distracters into the school, therefore, making it conducive for learning. School environment should be conducive with clean and well-maintained infrastructure to support teaching and learning.

1.8.1 Conceptual Framework

The study was guided by a conceptual framework (Figure 1.1) which demonstrates the interaction between instructional leadership practices and school academic environment moderated by Ministry of Education and TSC policies. The independent variable is instructional leadership practices that have five sub-variables: goal setting, monitoring instruction,

promotion of teachers' professional development, promotion of collaboration among teachers and resourcing.

As an instructional leader principal is expected to ensure that a school goal is in place (Kabeta, et al.2013). Goal setting provides direction for teachers and learners as they keep them focused on students' academic attainment and learning. Merely setting goals may not influence teaching and learning. Communicating the set goal enhances accountability, sense of ownership and instruction (Alig-Mielcarek, 2003; Lineburg, 2010). School principals should not only ensure that goals are clear but should also cultivate staff commitment to work towards its attainment (Day & Sammons, 2014) and keep the goal alive for the period it has been set.

To be effective in monitoring instruction the principal should maintain high presence in school. They should adopt management processes that promote effective curriculum delivery such as walk through, impromptu visits to classrooms during lessons and maintaining visibility in school. Although principals may not have specialized subject knowledge in all subjects they should endeavor to underpin monitoring instruction through direct supervision or designate personnel (Bendkinson et al., 2012) to co-ordinate instruction within academic departments in which they have specialized expertise while still maintaining accountability for instruction.

Instructional leaders should ensure that teachers are accomplished in curriculum delivery to improve students' academic performance (Novlette, 2015). They should collaborate with teachers to identify and develop programmes for teachers' professional development. According to Nettle and Herrington (2007) principals should set aside time and other resources for teachers' professional growth. Principal's role in teachers' professional growth involves classroom visitation, observation and facilitation to attend workshops, seminars, conferences and other in-service training (Enueme and Egwunyenga, 2008). Cultivating collaboration among teachers also enhances teachers' work performance.

To promote effective teaching and learning principals should create an environment that supports teachers' collaboration by encouraging teamwork around instructional activities such as team teaching, planning for instruction and joint setting and marking of tests and examinations. Principals influence students' achievement by creating a collaborative environment in which teachers work together to enhance students' learning (Harvey & Holland (2011). Teachers' collaboration strengthens instructional practices and creates more learning opportunities for the learner (Paulos, et al., 2014). Instructional leaders promote professional communities (Harvey and Holland (2011) where experienced teachers can guide less experienced ones on improving instruction.

To support teaching and learning principals should mobilize resources for their schools (Day & Sammons, 2014). Access to adequate resources influences learning however Ndaita (2013) observes that quality of education depends not on abundance of resources but their management. For resources to be utilized optimally school principal must supervise their use. The principal must plan, organize and manage all available resources (Mugure, 2012). Principals need to institute policies on use of available resources to optimize their utilization in support for teaching and learning. Teachers are key in enhancing school environment.

The dependent variable is school academic environment. Creating an environment conducive for teaching and learning requires the principal to secure adequate resources to support teaching and learning. Principals should maintain high presence (Al Hosani, 2015) in school and involve students in meaningful discussions on academic and non-academic matters to reinforce positive academic behaviors such as school attendance and attention to school work. School principals should ensure that teachers recruited in their schools are not only qualified to teach but developed to support caring relationships with learners (Blum, 2005) to promote school attendance, attention to school work and academic attainment while discouraging indiscipline

Conducive academic environments help learners connect with teachers, other learners and what is taught in school. Such learners develop attachment with school and are academically engaged (Schap, 2005). Academically engaged learners attend school regularly, are attentive to school work and are less likely to engage in indiscipline activities. Conducive school environments are characterized by rules that spell out expected behaviors for learners. To enhance school academic environment, principals need to develop and communicate discipline policies describing acceptable behavior within school such as reporting time and how to associate with other learners, especially those of the opposite gender. School environment ensures that teachers are supported and have a shared sense of purpose.

The intervening variables are TSC policies and Ministry of Education policies. In the code of conduct for teachers (2015) the Teacher Service Commission advocates for continuous monitoring of teachers' performance in curriculum implementation at the school level. Monitoring curriculum implementation has been designated to the principal who supervises and ensures quality implementation of curriculum verifies teachers' professional documents, supervises the actual coverage of syllabus, and ensures that teachers attend classes; among other roles.

In the National Education Sector Plan (NESP) for 2013-2018, the government through the Ministry of Education in Kenya commits to the provision of Free Day Secondary Education (FDSE) through the provision of equitable, adequate learner-friendly infrastructure and disbursement of a capitation grant of 10,265 Kenya shillings annually per learner for instructional resources and operational resources (MOE, 2015).

These policies inform the principals' instructional leadership practices in their endeavor to improve students' learning and achievement. Put in a practical space the interaction between

instructional leadership and school academic environment mediated by the Ministry of Education and TSC Policies may be illustrated as follows:

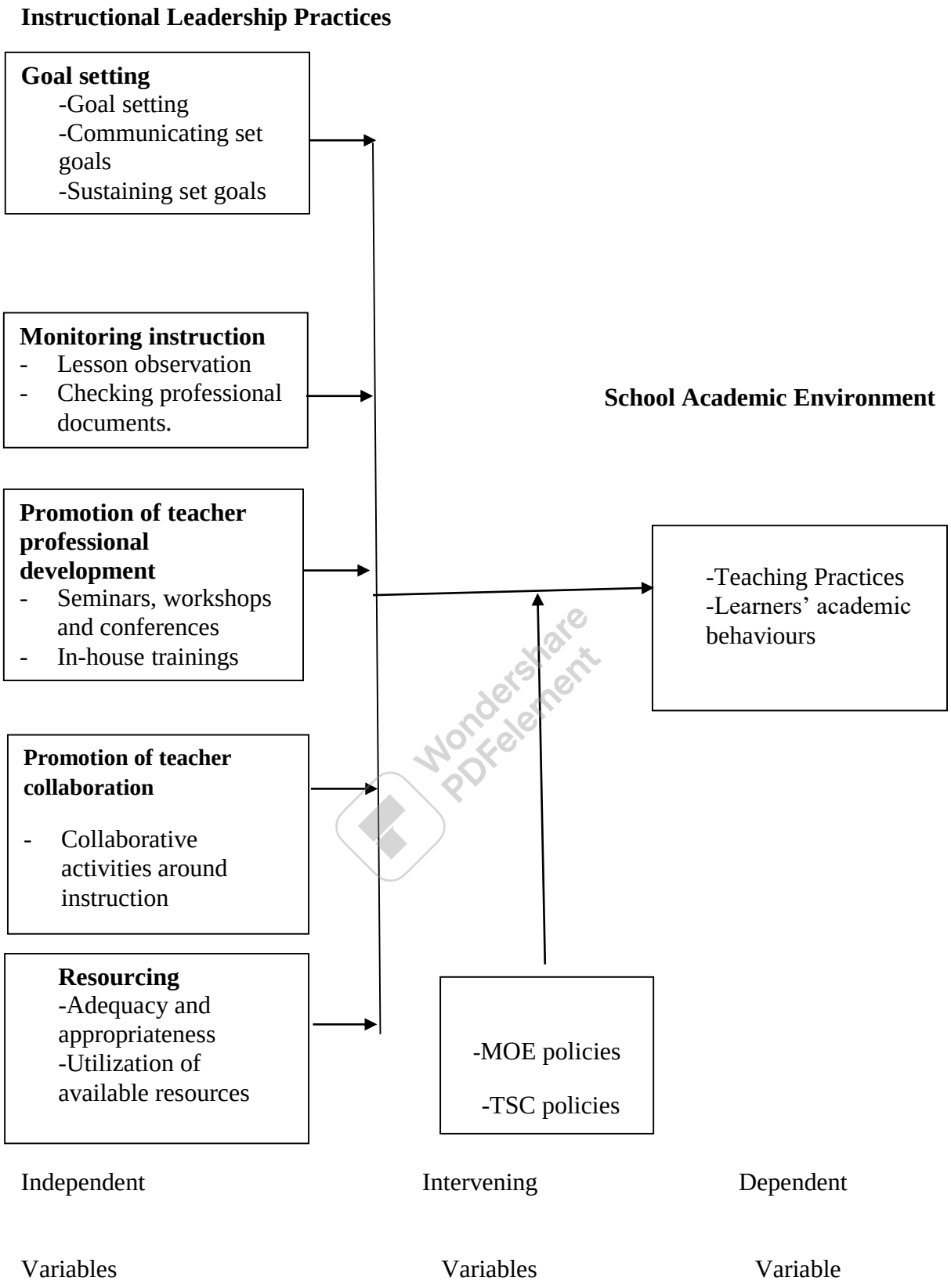

Figure 1. 1 Conceptual Framework

1.9 Operational Definition of Terms `

The following terms are pertinent to the study and their meanings as used in this study are as follows:

Academic Environment: This is a school setting in which teaching and learning are prioritized.

Instructional leadership practices: Principals' activities directed towards influencing the teaching and learning processes by promoting collaboration in school, promotion of teachers' professional growth, monitoring of instruction, setting, communicating and sustaining school goals, provision and utilization of teaching-learning resources and influencing learners' academic behaviors.

Leadership: Conscious efforts by a school principal to harness teachers' and learners' efforts to achieve the school goals by building trust in the teachers and inspiring them to be innovative and committed in teaching.

Learners' academic behavior: This refers to learners' conduct that includes school attendance, class attendance, attention to school work and discipline.

Principal: The head of a school whose leadership role is critical in improving school achievement by promoting teaching and learning.

Teaching practices: Refers to aspects of teachers' work practices which include preparation and use of professional documents for instruction, mastery of content, class attendance, handling learning challenges, utilization of teaching-learning time and provision of feedback to students.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature on instructional leadership and school academic environment. It draws on previous works carried out by other researchers and relates it to the current study. It focuses on how principals as instructional leaders can influence variables within the school environment to enhance teaching and learning and eventually academic performance. The chapter examines the influence of principal instructional leadership practices on school academic environment. Specifically, it addresses influence of goal setting, monitoring instruction, promotion of teachers' professional development, promotion of collaboration and utilization of teaching and learning resources on school academic environment. Lastly, it demonstrates the research gaps identified from review of literature.

2.2 Influence of Principals' Instructional Leadership on School Academic Environment

School principals influence school academic environments through their interaction with teachers and learners on a day to day basis. By carrying out their instructional leadership role effectively the principal creates better working environment for teachers and conducive learning space for the learner. The principal creates a professional community (Harvey and Holland (2011) which gives the teachers an opportunity to continually improve their professional skills through collaboration with the principal, other teachers in their areas of specialization and within the school as a whole. According to AI hosani (2015) principal's role is vital in influencing teaching practices which in turn contributes to students improved learning and attainment.

The instructional leader influences teachers' instructional practices by inspiring them to employ their expertise in improving learning opportunities while creatively optimizing utilization of

available teaching-learning time and resources such as text books, libraries, laboratories among others. Instructional leaders influence teaching practices adopted by teachers by setting goals and communicating them to teachers, promoting collaboration among teachers, promoting teachers' professional growth, monitoring instruction, availing and ensuring effective utilization of teaching-learning resources (Lineburg, 2010; Mafuwane ;2011; Novlette (2015)

2.2.1 Influence of Goal Setting on School Academic Environment

The ultimate goal of any institution of learning is to ensure that students acquire desired knowledge, skills and attitudes. To do so schools set goals. According to Kabeta et al. (2013) goal setting involves the principal working in collaboration with other stake holders to ensure that a school goal is in place and that it is focused on enhancing students' academic attainment. Defining and communicating academic school goals encompass activities that focus attention on the core business of the school: teaching and learning. Setting academic goals should be done on annual basis and should be communicated to teachers and learners during formal and informal meetings such as school assemblies, staff meetings or through the school newsletter where they exist.

The principle of goal setting is highlighted in a qualitative study carried out among middle level teachers in United states of America by Demic-Carthew et al. (2017). The purpose of the study was to determine the strategies used in goal setting in personalised environments. The study found out that the strategies implemented by schools and teachers were not aligned to critical elements of personalized learning because students were not involved in the process. The study not only failed to include learners but also did not address how goal setting influence the school academic environment.

Similarly, Alig-Mielcarek (2003) carried out a study on instructional leadership, academic press and students' achievement in elementary schools in Ohio. Instructional principals used

data to make decisions and collaboratively developed goals. The study further found out that these goals increased efforts exerted by teachers, learners and other members of the school leading to attainment of desired academic achievements. It was further observed that setting and communicating shared goals influenced students' achievement positively. The researcher also observed that frequent communication of the school goal by the instructional leader promotes accountability and a sense of ownership. The set goal should be in line with the school curriculum and should also not contradict the laid down policies and procedures by the country's Ministry of Education. The research focused on setting and communicating the set goal to teachers, learners and parents and does not address how the set goal is sustained throughout the period for which it has been set and how this influences the school academic environment.

Equally, Lineburg (2010) studied high school principals' influence on change in teachers' instructional practices in Eastern, Central Mountain and Pacific in America. The study used interviews to collect data from 9 principals and 9 teachers in a longitudinal study lasting one year and questionnaires to collect quantitative data from 562 teachers drawn from rural and urban areas in the three regions. The study found out that principals guided goal setting processes. The study findings agree with Aligmiel- Carek (2003) on that communicating school goals to the teachers enlightens them on the right strategies to adopt in order to address learners' needs adequately. These goals guide teachers' decision regarding teaching. The study does not address how shared goals of a school bring the school community together to create a conducive environment for teachers and learners. The study just like Aligmiel-Carek (2003) and DeMink et al. (2017) did not collect data from students who are the recipient of the teaching that takes place in schools. Data collected from students can be used to verify that collected from head teachers and teachers. Additionally, students' perspective regarding matters relating to how their learning should be conducted may differ from teachers and head teachers (Pinto, 2014).

Another study conducted in Sweden by Holmberg (2014) on principals' goal setting actions while managing their schools found out that majority of goals written on the school work plan were not specific enough to influence motivation and performance. Further the study found out that principals did not link work to performance. Unlike the current study that examined several strategies used to sustain set goals, Holmberg (2014) only assessed whether the principal referred to set goals during meetings.

In a study carried out in Kentucky, German, Dotson (2016) confirms that goal setting influences performance. The study compared students' performance on reading before and after goal setting and observed that their performance in reading improved significantly after utilizing goal setting within a period of two years.

Further, a case study conducted by Manaseh (2016) on instructional leadership practices of heads of secondary schools in managing instructional programmes in Tanzania established that, head teachers did not set goals to help them focus on ensuring that the syllabi are covered. A school principal should ensure that a goal is in place (Kabeta et al., 2013; Mestry, 2017). However, this does not mean that the principal should set the goal alone. Setting appropriate goals helps in developing strategies and actions that can lead to attainment of the set goal (Sinay et al. 2016). School principal should not only ensure that a school academic goal is in place but also the constant communication of the same to teachers, students and other stake holders so that it guides every activity within the school. The principal should be clear about the contribution of day to day teaching and learning towards attainment of the set goal. The study focused on principal's role in managing instructional programme and did not address how this influences school academic environment.

In another study conducted in Tanzania by Kaai (2016) teachers were unable to explain the vision and mission of the school. This posed a challenged in creating a common and shared sense of purpose. Failure to state the school vision and mission indicates that teachers are not involved in crafting them (Masuku, 2011). Additionally, it shows that school leadership does

not align day to day school activities to school mission, vision and goals. The study looked at school vision which states in broad terms a school long term objective. It did not address school annual academic goals which spell out the specific expected results.

Goal setting helps create a culture of learning for teachers and learners as it spells out expectations for the teachers and learners (Harvey & Holland (2011). Further, Sinay et al. (2016) posit that set goals help teachers to review their classroom practices. It is however important to note that goal setting in itself may not influence academic achievement. Inspiring teachers and learners to work towards the set goals as argued by Hull (2012) is what brings out the distinction in students' performance.

2.2.2 Influence of Monitoring Instruction on School Academic Environment

Monitoring instruction is one of principals' primary roles as instructional leaders. Monitoring instruction can be carried out through lesson observation and checking of professional documents such as lesson plans, schemes of work, students' note books, class attendance registers and records of work covered. According to Chen (2018) the purpose of lesson observation is to help the teacher to reflect on their job performance by diagnosing and providing solutions to teaching problems through provision of timely feedback. Additionally, principal should work with teachers to help them develop teaching skills and positive attitudes towards their work. Lesson observation can also be done for promotions and appointment (Teachers service commission, 2015). The instructional leader should be visible in the school in order to monitor instruction effectively.

The instructional leader should supervise teaching and learning, monitor students' progress and use evaluation data to improve instruction (Hallinger & Murphy, 1986). The instructional leader should maintain high presence in school as it would influence teachers and learners. It is important that they monitor instruction to ascertain that teachers cover syllabi in time and that teaching and learning time and other resources are utilized effectively. Instructional leaders

should also ensure that instructional time allocated for each subject is in line with established policies and procedures.

To determine the effects of two instructional leadership practices on students' learning, Lee, Walker and Chui (2012) carried out a survey in Hong Kong secondary schools. The study collected data from students and key academic staff using standardized tests and likert scales. The study found out that principals' leadership practices which were linked to direct supervision were perceived negatively by key academic staff. Direct supervision which involves lesson observation is meant to improve teachers' effectiveness in teaching by encouraging them to be more innovative in order to enhance learners' academic achievement. The finding by Lee et al. (2012) contradicts Weber (1987) who opines that lesson observation enhances teachers' professional development if done skilfully. It is however important to note that lesson observation can only enhance teachers' growth if properly planned and if there exist trust between the teacher and the appraiser. The study limited itself to two aspects of instructional leadership, that is, direct supervision and instructional management.

To determine the relationship between supervision and teacher performance and attitude, Hoque et al. (2020) carried out a survey in secondary schools in Pudu District, Malaysia. The study found out that teachers were comfortable using already acquired teaching skills and they felt that supervision does not impact on their performance. Further, the study found out that although teachers were aware of the role of supervision in their professional development observation made them anxious and their attitude towards supervision was unfavourable. The study was purely quantitative which implies that it may not have explored fully how supervisors practice developmental approaches on teachers. The study also concentrated on schools in urban area which supervisors could access with ease unlike schools in the rural areas.

In another study conducted in private and public high schools in Malaysia by Diantawati et al. (2021) academic supervision was found to influence performance of teachers. The study also

found out that supervision influenced teaching competency. Although lesson observation was a shared responsibility between the principal, Deputy principals, senior teachers and chair of committee it was rated as satisfying by the studied teachers. The study focuses on teachers' work performance and not on how this influences students' learning or the environment in which they learn.

In his study on instructional leadership of heads of secondary schools in Tanzania Manaseh (2016) observed that head teachers did not devote time to oversee teaching and learning processes. The heads of schools monitored instruction by checking schemes of work, lesson plans, subject log books and class journals. The researcher further observed that head teachers did not observe teachers in class as they considered it lack of trust in the teachers. They monitored instruction by walking around outside the classroom. As a result, there was poor coverage of syllabi. Although walk through informs the principal whether teachers attend classes or not monitoring instruction through lesson observation ensures that teaching and learning takes place and that the right curriculum is delivered to students accordingly.

Lesson observation by the instructional leader makes teachers more careful about teaching (Nzobonimpa, 2011). Lesson observation would keep the principal informed about what is happening in classrooms and gives the teacher and principal an opportunity to rectify any slipups. The principal is expected to understand the principles of quality instruction, and to have sufficient knowledge of curriculum to ensure that appropriate content is being delivered to all students. The principal should monitor instruction through lessons observation and by ascertaining that teachers prepare and use the professional documents as well. Lesson observation not only informs the principal what is going on in classroom but also enhances quality of teaching (Wanzare, 2012; :Leithwood, 2000). and learning. Monitoring teaching and learning process not only ensures that the syllabi are covered in time, but also enhances teachers' professional growth. The current study not only established whether the principal

monitors instruction through lesson observation but also how this was carried out which is not reflected in the study by Manaseh (2016).

To assess principals' classroom instructional leadership role and its effects on teachers' job performance Enueme and Egwunyenga (2008) conducted a survey in 12 government schools in Asaba Metropolis Delta, Nigeria. The study used questionnaires to collect data from 240 teachers who were selected randomly. Teachers considered their principal's instructional leadership to be high. They indicated that their principals encouraged them in classroom instruction. Principals checked professional documents and offered suggestions on how to improve. The study did not tackle lesson observation which gives the supervisor an opportunity to observe the teacher in action as he assesses their mastery of content, pedagogical skills, class management and provision of feedback among other aspects of teaching. Monitoring instruction in the classroom can draw the principals' attentions to areas that need improvement to ensure that the school environment is conducive for learning.

Similarly, Mutuku (2018) conducted a study on influence of instructional leadership practices on academic performance in public secondary schools in Machakos County Kenya. The study adopted descriptive survey design and collected data from 38 principals, 380 teachers and 380 students using questionnaires. The study found out that managing instructional programme influenced academic performance. The study did not address how principal instructional leadership influences school academic environment which is the main focus of the current study. The researcher posted the same items in teachers, principals and learners' questionnaires. Although the main tool for the study was teachers' questionnaire the language in learners' questionnaire was complex thus raising questions on the validity of data used to triangulate that collected from teachers and principals.

2.2.3 Influence of Promotion of Teachers' Professional Development on School Academic Environment

Promotion of professional growth for the teachers refers to instructional leaders' efforts to secure resources that facilitate professional development (Nettles & Herrington (2007). Teachers' professional development involves in-service training in specified skills that enhance their practice. Teachers' professional development should be engrained in their day to day work. Teachers should sharpen their skills through experience and interaction with other teachers. The principal should provide support to teachers as they carry out their day to day practices in teaching. Teachers' professional development provides them with opportunities to advance competencies in their areas of specialization. It sharpens their ability to perform functions related to their jobs as teachers. According to Barllotti and Connely (2013) instructional leaders should promote school-wide professional development among teachers.

Teachers' professional development should be continuous and should not only be aimed at enhancing teacher's work performance but also creating learning opportunities for the learner (Chen, 2018). It should be focused on enriching students' learning by bridging the gap between students' actual learning outcomes and the set goal. Successful principals provide professional development for teaching staff by organizing time for training, paying for training as well as acquiring materials for professional development (Nettle and Herrington, (2007).

In an exploratory study carried out by Jawa (2014) on instructional leadership in Indonesian school reform, professional development programmes are credited for providing teachers with current information in their subject areas studied. The study further found out that interaction with other teachers from other schools sharpened teachers' selection of teaching activities and made them more creative and confident in their work. The study observed that professional development helps teachers integrate current developments in education, making learning more

interesting for the learner. The study focused on professional development programmes organized at district level. It does not address in-house programmes tailored to address specific training needs for teachers which is one of the concerns of the current study.

In a qualitative study carried out in Zimbambwe by Masuku (2011) teachers agreed that professional growth should be enhanced as it promotes pedagogical maturity. Head teachers in the study indicated that they promoted teachers' professional development by stimulating discussions among teachers on their instructional practices. Head teachers also met with individual teachers to discuss challenges faced in their work. This may benefit teacher's work performance as it may address specific areas of needs. Further, the study found out that professional development for the teachers was hindered by limitations of time and financial resources. This concurs with the findings by Enueme and Egwunyenga (2008) who observed that principals were rated highly by teachers in promoting teachers' professional development but their efforts were thwarted by lack of financial resources. It is important to note that in house collegial professional training may be conducted at minimal or no cost at all. The head teacher should inform staff about current issues in the curriculum and provide support needed for teachers to attend workshops, seminars, and conferences on such changes. Instructional leaders should build a culture of collaboration and learning that promotes peer coaching among teachers. The researcher collected data from teachers, heads of departments, school heads and parents but failed to collect data from students who benefit from teaching and learning cultures created by instructional leaders.

A longitudinal survey conducted by Organisation of Economic Co-operation Development, OECD (2009) among 200 principals and 90,000 teachers of lower secondary schools in 23 countries found out that most of the teachers in the sample had attended some professional development activity. However, 55% of them indicated that the programme was inadequate as they were unsuitable and did not address their training needs. The study does not indicate how

data were analysed. The study used one questionnaire to collect data from different categories of respondents which may have limited one part of the respondent.

Another study conducted by Yilmaz and Sedat (2021) among Turkish language teachers found out that although teachers in the study supported professional development programmes for teachers they strongly felt that they should be managed locally in order to address teachers' training needs and real problems experienced in their classroom practices. The study did not establish whether principals assisted teachers to implement what is learnt in the professional development programmes attended. Teachers require support and guidance in order to implement what is learnt during such trainings (Burns & Lawrie, 2016).

Teachers' dissatisfaction with the training programmes in the study by OECD (2009) may indicate lack of teacher involvement in decision making regarding their professional development needs. The need to involve teachers in designing professional development programmes is further resonated by Yilmaz and Sedat (2021) who observe that when teachers are involved in identifying professional development programmes to participate in, the trainings not only meet their needs but also enhance their classroom practices. Principal should discuss with teachers about teaching and learning to identify teachers' training needs. Principals should be committed to develop professional programmes that are purposively designed to meet teachers' needs. Collaborating with teachers to assess training needs for staff development and setting professional growth goals with teachers will motivate teachers to go out of their way to use creativity to enhance their teaching. These practices are likely to create more learning opportunities for the learner and eventually improve their academic performance.

A quantitative study carried out in Sharjah schools by Al Hosani (2015) established that there is a moderate relationship between promotion of professional development and teaching practices adopted by teachers. Leadership effects on students' achievement occur largely

because effective leadership strengthens teachers' professional development in areas of methodology and mastery of content (Leithwood et al., 2010). Leadership creates a special environment within which teachers work together to improve their practice and improve student learning. Instructional leaders' efforts to promote teachers' professional growth cultivate instructional practices amongst teachers that are strongly associated with students' achievement. The study used principals to distribute questionnaires which may have introduced a bias in the study.

On her part Samoei (2012) studied instructional supervisory roles of principals and its influence on students' academic achievement in public secondary schools in Nandi County, Kenya. The study collected data from 12 principals, 36 teachers and 69 learners using questionnaires, interview guides and document analysis guides. The study observed that in Kenya head teachers conformed to most responsibilities of an instructional leader but failed to promote professional training for teachers. Professional development is important as it enhances teachers' mastery of content and pedagogy. Teachers who know that their principal is interested in their professional growth are more likely to be motivated and effective in their teaching. Unlike the current study that looked at promotion of teachers' professional development as one of principals' instructional leadership practices the study did not address this practice adequately.

A meta-Analysis of 16 different research studies carried out in the United State of America between year 2006 to 2008 by Blank and Alas (2010) echoes findings by Samoei (2012) and Chen (2018) that teacher professional development enhances students' achievement. The researchers reviewed studies that drew their samples from public elementary and secondary school mathematics and science teachers that had participated in professional development programmes. The analysis did not measure how professional development influenced teacher knowledge and instructional practices. Just like Yilmaz and Sedat (2021) the analysis did not

assess whether teachers implemented what was learnt in the professional development programmes.

2.2.4 Influence of Promotion of Collaboration among Teachers on School Academic Environment

Collaboration within the school involves the principal working together with teachers and learners to enhance learners' achievement through effective teaching. Effective collaboration is defined as engaging in regular routines where teachers communicate about classroom experiences in an effort to strengthen pedagogical expertise (Poulos, et al. 2013). Collaboration among teachers involves working together with teachers in the same or different area of specialisation to enhance students' learning. Teachers work together in planning, delivering and assessing instruction (Sciullo, 2016).

A study conducted by Poulos, et al. (2013) on the role of teachers' collaboration in driving school improvement in five public schools in Boston found out that school leader created structures and routines that enhanced collaboration in the entire school. This involved creating schedules that allowed teachers who taught the same classes and areas to work together. The study examined strategies used by schools to build and sustain collaboration. The study utilised questionnaires, interviews for school leaders, focused group discussions and observation for teachers' team meetings and teachers' logs. Further, the study established that collaboration between school leaders and teachers were found to create more learning opportunities for the learner. In such schools, departmental goals were clearly spelt out and were linked to the school strategic plan. Teachers considered their pedagogical practices as having been shaped by the day to day activities that involved learning from other teachers. The study neither indicates the sample size nor the data analysis procedure adopted for the study. Unlike the current study that assessed instructional leadership practices in school performing poorly in national examination,

the study by Paulos et al. (2013) focused on leaders' and teachers' practices in best performing schools.

A study conducted in a rural state located in the North Eastern region of the United State of America by Sciullo (2016) on the role of school leaders in collaboration between regular and special education, teachers showed that school principals used teacher collaboration for school improvement. The case study that collected data using observation and interviews from school leaders found out that although they expected teachers to take time together to review and analyse data on students there were no procedures to show that this took place. The study did not collect data on teachers' perceptions of the role of school leader in their collaboration. It also did not address teachers' involvement in collaboration which the current study paid a lot of attention to.

Similarly, Miller et al., (2010) studied the relationship between principal instructional leadership and teacher collaboration around instruction in Nothern region of Midwestern State, America. The study also sought to find out whether the influence of instructional leader on teachers' collaboration impacts students' academic attainment. The study collected data from 1605 teachers in 96 elementary schools using mailed questionnaires. The study found out that teacher collaboration mediated by instructional leadership enhanced the mean school achievement in 3rd grade reading and mathematics. Even though the study states that the aim was to determine if the study variables were statistically related it does not state clearly the statistical tools used in data analysis. The study focused on influence of teacher collaboration on school achievement and not on the school academic environment.

In another study conducted by Gumus, Bulut and Bellibas (2013) on the relationship between principal leadership and teacher collaboration in Turkish primary schools instructional leadership is associated with teacher collaboration. While instructional leadership influenced

teacher collaboration positively, administrative leadership had negative effects. The study found out that principal involvement in supervision of instruction especially lesson observation and provision of feedback to teachers enhanced teacher collaboration. The study also found out that working with teachers on the set goals and promoting professional development activities for teachers enhanced teacher collaboration.

The researchers further found out that teachers shared materials and experiences largely especially where schools were headed by principals who communicated regularly to teachers and learners. Collaboration between teachers and principals keeps the teacher abreast with their work. The principal should collaborate with teachers and other stake holders in setting school academic goals, assessing training needs for the teachers as well as developing teaching-learning strategies and developing teaching-learning resources in order to improve learners' academic performance. The study only depicts principals' perceptions of their own leadership and does not show how teachers perceive their principals' leadership in steering collaboration among them.

To examine the influence of three leadership constructs namely: instruction, collaboration and parental involvement on the school climate, Fultz (2011) studied the relationship between instructional leadership and school climate in 2,761 elementary schools in America. The study adopted the transformational leadership model. The study used descriptive survey design and stratified sampling method to select 2761 principals and 10,293 teachers. The study used two sets of questionnaires; teachers' and principals' and analysed data using Anova and multiple linear regression. The study observed that principals' focus on collaboration influenced school climate positively but did not impact positively on teachers' perceptions of the school environment. The study looked at collaboration as involving goal setting, evaluation of teachers and selection of content for teacher professional development programmes for teachers in the

school. The study was not specific on collaborative activities that enhance teachers' work performance.

A survey conducted among 1825 American teachers by Johnston and Tsai (2018) on the prevalence of collaboration among teacher panels found out that only a small portion of the sampled teachers (31%) had sufficient time to work with other teachers. Nearly half of the respondents (44%) reported that they never had time to observe other teachers as they taught. The study further indicates that teachers in high poverty schools observed and provided feedback on colleagues' instructional practices from informal observations more frequently than low poverty schools. However, collegial supervision was hindered by a fixed school schedule, teachers' unwillingness to collaborate and failure to stand in for them as they participated in observation. Teachers who reported having worked with other teachers indicated that they mainly collaborated in meetings and holding discussions with colleagues. The study had a 53% return rate which is below the acceptable threshold of 80% according to Gall, Borg, and Borg (2007). The study does not indicate how collaboration among teachers influences their classroom practices or learning.

In an experimental study that used mathematics achievement test to collect data, Saka (2021) found out that students taught by teachers who collaborated performed better than those taught by isolated teachers. The findings confirm observation by Schleifer, Rinehart and Tessy (2017) who observe that teachers working in collaborative environments embrace the norm of continuous improvement and professional community which in turn encourages teachers to discuss their work with colleagues with a view of improving students' learning. The study used only one teacher in the experimental group which affects generalization of study findings.

2.2.5 Influence of Utilization of Available Teaching- Learning Resources on School Academic Environment

Learners require an enriched physical environment to perform well in academics. A well-equipped school not only makes the school conducive for learners but also makes teaching easier. A study conducted by Usaini et al.,(2015) in Malaysia on influence of school environment on academic performance in secondary schools found out that schools enriched with modern facilities such as library and computers made learning easier. Students from schools with such facilities were observed to perform better. The study utilised descriptive survey research design and stratified random sampling and collected data using questionnaires. The study does not specify the informants for the study.

In another study conducted in Zimbabwe by Masuku (2011) teaching and learning resources were found to be inadequate. These included classrooms, furniture and text books. This made the school environment unfavourable for learning. Inconsistent supply of water was also reported to negatively influence teaching and learning of certain subjects such as agriculture.

Findings in Masuku's study are echoed by Nwachuku and Anina (2014) in a study on school environment and teachers' performance in Economics in 15 senior secondary schools in Local Government Area of Delta Estate, Nigeria. The study collected data from 810 participants who included principals and teachers using questionnaires. The study found out that school environments with inadequate teaching and learning resources challenged teachers' professional standards. The study observed that school environment that lacked adequate textbooks, classes and workshops affects teachers' and learners' performance, stifles their motivation and students 'discipline. Studies by Masuku (2011) and Nina and Nwachuku (2014) do not indicate how the principal influenced utilization of available resources to optimize teaching and learning.

Another study conducted in Nigeria by Sunday and Olufunmilayo (2008) on impact of environmental management on students' quality output, availability of physical facilities was found to influence students learning. The study adopted ex-post facto research design and collected data from teachers, principals and learners using questionnaires. Despite having different categories of respondents the study used only one set of questionnaire which may have not collected data appropriately.

Students' behaviours are shaped by the environment in which they learn. As such school environment should be enhanced to not only influence learning but also learners' behaviours. Schools endowed with text books and other resources ensure that learners are academically engaged through home and classwork (Mugure, 2012). Inadequate physical conditions affect the internal processes in a school and eventually performance. However, available resources should be properly maintained. The researchers further note that facilities that are well cared for motivate both learners and teachers. School heads should ensure that school buildings, furniture and other resources are properly maintained.

Provision of other facilities such as water, electricity, perimeter fences creates a conducive environment for both teacher and learner. School environments should nurture teachers and learners and change the general atmosphere to foster learning. The instructional leader should liaise with the heads of departments in order to ensure that all materials required are budgeted for and availed on time for the teacher. Provision of adequate resources arouse learners' interest and motivate them to work hard.

In a study conducted in Baringo County, Kenya, Tomno (2014) looked at teachers' perceptions of principals' instructional leadership practices and their influence on school academic achievement. The study collected data from 12 principals and their deputies and 253 teachers using structured interviews for the principals and an unstructured questionnaire for teachers.

The study found out that principal ensured that instructional materials are consistent with achievement of school's curriculum objectives. Although the study found out that, principals secured instructional resources it does not outline how the principal ensured their effective utilization to support teaching and learning.

To determine teachers' perceptions of resource utilization Mugure (2012) conducted a study among 10 principals and 10 teachers in Mathioya District, Murang'a County, Kenya. The study adopted expost facto research design and collected data using questionnaires. The study found out that textbooks were used extensively for teaching and learning. However, laboratories, home science and computer rooms were underutilised as they were not properly equipped to support practical lessons. Although the study indicates that stratified random sampling was used to select schools it does not indicate how the 10 teachers included in the sample were selected. The sample used in this study was small which raises questions about the validity of the results.

In a survey carried out in Nyamira Sub-county, Nyamira County, Kenya, Okongo et al.(2015) found out that availability of resources enhance the implementation of inclusive education in pre-school by promoting curriculum delivery, pupils enrolment, retention and catering for learners with special needs. While findings by Okongo et al. (2015) converge with findings by Mucai, 2013: Mugure ,2012 and Tomno,2014 that resources were in adequate, their study was carried out in pre-schools. Additionally, the study does not address utilization of resources which is believed to enhance learning.

Similarly, Mucai (2013) conducted a survey in secondary schools in South Mbeere, Embu County Kenya. The study collected data from head teachers, heads of department and teachers using questionnaires, lesson observation and check lists. The study found out that student utilized text books by reading ahead of the teacher, group discussions, writing notes, attempting assignments and for daily learning. The study further established that day schools lacked

libraries and books were inadequate with book to student ratio being 1:5. Further the study found out that science practical lessons were not carried out appropriately as laboratories were poorly equipped. Teachers demonstrated experiments as students watched.

The finding by Mucai (2013) that teaching-learning resources were in adequate converges with those of Masuku (2011) and Nwachuku & Nina (2014). Availability and adequacy of resources enhances school academic environment as teachers teach with ease and learners learn in an enriched environment. School environments influence students' academic performance (Sunday and Olufunmilayo, 2008; Usaini et al.,(2015). The researchers maintain that physical facilities determine the school physical environment. Inadequate space and poor arrangement in classrooms, libraries and laboratories affect the learning environment adversely. It is important to note that provision of teaching- learning resources in itself is not adequate; an effective instructional leader should ensure that the resources are effectively utilized for the attainment of the school goal. The instructional leaders influence academic performance by ensuring that available resources are utilized effectively.

The quality of education depends largely on the way schools are managed and not abundance of resources (Ndaita, 2013). Long before students are admitted into the school the physical environment should be ready for them. Instructional leadership in secondary schools emphasize the development of favourable learning environments for teachers, focusing on the ability of principals to stimulate teachers' innovative behaviour.

School principals influence teachers and teaching practices because of the organizational climate they create and not through specific interactions or interventions. However organizational climate on its own is not adequate to influence teaching and learning process in school and the academic attainment. School environment should be enhanced through provision of material and physical resources.

2.3 Summary of Research Gap

Many of the studies reviewed (Mutuku, 2018; Aligmiel-Carek, 2003; Samoei, 2012: Blank and Alas 2010: Chen, 2018 and Tomno, 2014) looked at influence of instructional leadership practices on academic achievement. Additionally, studies by Miller et al. 2010; Fultz, 2011; Gumus et al.2013: Okongo et al. 2015: Alig-Mielcarek 2003) targeted institutions of learning other than secondary schools. Studies by Mugure 2012; Mucai, 2013 and Miller et al., 2010 only address one aspect of instructional leadership. Other studies by Al Hosani, 2015: Demic-Carthew et al.,2017: Jawa ,2014 and Usaini, et al., (2015) focus on other geographical context outside Africa and specifically Kenya.

The researcher observes that among the literature reviewed there is absence of research that assesses influence of principal's instructional leadership on school academic environment. The current study investigated the influence of principal's instructional leadership practices on the academic environment in public day secondary schools in Kisii Central Sub-County. The current study not only sought information on whether the instructional leaders set goals for the school but also solicited information on how the school goals are set, how the set goals influence teaching and what strategies the principals put in place to ensure the attainment of school academic goal on a day to day basis and how they inspire teachers and learners to work towards the attainment of the set goal. The current study not only explored the physical environment but the relationship amongst students as well as relationship between students, teachers and school leadership.

Teaching practices adopted by teachers largely influence school academic environment. The study conducted in Kisii Central Sub- county focused on teaching practices right from planning instruction to provision of feed back to the student. As such the study assessed whether the instructional leader influences teacher to plan for instruction by preparation of professional documents and giving feed back to the learner. The current study utilized mixed research

methods and applied source and methodological triangulation in order to enhance the validity of the data collected. It looks at principal's instructional roles as those that go beyond influencing teaching to include learners. This study looked at the principal as an instructional leader whose roles go beyond goal setting, managing the curriculum and creation of a learning environment to influencing other aspects which may not be necessarily academic but influence learning. None of the studies reviewed adequately address principals' instructional leadership influence on school academic environment in African context and specifically in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This chapter describes the methodology that was used to collect data that filled the research gap identified in the previous chapter. The chapter contains the research design, locale of the study, target population, the sample size and the sampling procedures, data collection instruments and procedures, validity and reliability, data analysis procedures and ethical considerations made in the study.

3.2 Research Design

The study adopted cross sectional survey research design with mixed methods. A survey describes the characteristics of a population with respect to one or more variables (Frankeal, Ellen and Hyun, 2012). Cross sectional survey design is used when the focus is on description of characteristics of variables under study that occur at a single point in time (Saunders, Lewis & Thornhill, 2009). The cross sectional survey research design was preferred for the study since it is an efficient method of collecting original data from a wide range of respondents and provided an opportunity for the researcher to collect relevant information on instructional leadership practices and school environment in one snap shot (Frankeal et al.,2012).

Cross sectional survey research design was adopted as it allows generalization of sample findings (Macmillan and Schumacher, 2001) to similar contexts. Further, the survey design was preferred as it allowed the researcher to not only collect data from different categories of respondents but also to validate the data collected through use of more than one instrument.

The study used mixed methods approach that allowed for collection of data in one point in time using both quantitative and qualitative modes of inquiry. According to Creswell and Creswell (2017) use of mixed methods allows the researcher to understand the problem under

investigation with greater clarity by adopting both qualitative and quantitative methods. Use of both quantitative and qualitative inquiry enabled the researcher to triangulate findings obtained from principals, teachers and learners using different instruments to provide an elaborate understanding of influence of principals' instructional leadership practices on school academic environment. The study also collected data through document analysis and observation schedule.

3.3 Locale of the Study

The study was carried out in Kisii Central Sub-county in Kisii County. Kisii central is a peri-urban sub-county that borders Nyamira County to the North west, Rangwe constituency to the south west, Migori county to the west and Homabay county to the south west (see Appendix 7). It lies between latitudes $0^{0,}$ 41'0S and longitude 34^{0}, 46'0E and covers a total area of 317.4km^{2}. Kisii Central Sub-county is one of the most densely populated sub-counties in Kenya with a population of 166,906 people. The main economic activities include subsistence agriculture, vegetable farming, small scale trade, dairy farming, tea and coffee growing.

There are 45 secondary schools in the sub-county with 25 being public day secondary schools. Kisii central sub-county is sub-divided into 6 educational zones namely: Matunwa, Kiogoro, Getembe, Ibeno, Birongo and Keumbu. The study sample was drawn using proportionate random sampling from each of the zones except Keumbu zone which did not have a public day secondary school at the time of the study.

3.4 Target Population

The study targeted principals, teachers and learners in 25 public day secondary schools in Kisii Central Sub- County.

3.5 Sample Size and Sampling Procedures

This section describes the sampling procedures utilized to arrive at the sample size used for the study.

3.5.1: Sampling of Schools

There are 25 public day secondary schools in Kisii Central sub-county. Proportionate random sampling was used to select 12 schools forming 44.4% of the target population which is in line Neuman (2007) who observes that 30% sampling ratio of the target population is adequate for reliable findings. Proportionate random sampling ensured that zones with more schools were given more chances than those with fewer schools (Johnson & Christensen,2017). The researcher obtained a list of all the day secondary schools in Kisii Central Sub-county from the office of the Sub-County Director of Education. Each school was assigned a number. The researcher then wrote each number on a separate paper, folded the papers, put them in a container and shuffled. The researcher picked a number at a time without replacing until the required number of schools was attained. The researcher then matched the picked numbers with the names of the schools in the list.

Table 3. 1 Sample Size for Public Day Schools

Zone	Population	Sampled School
Matunwa	4	2
Kiogoro	7	4
Getembe	4	2
Ibeno	5	2
Birongo	5	2
Keumbu	00	00
Total	25	12

Source: Ministry of Education, Kisii County

3.5.2 Sampling of Principals

The school principals are the lead instructional leaders of their schools. School principals were chosen because they are entrusted with instructional leadership in their schools and were believed to be in a position to articulate how the instructional leadership practices they adopted influence the academic environments in their schools. Principals whose schools were chosen were automatically included in the sample. Thus 12 principals were selected into the sample purposively as they were believed to be in a position to supply information on instructional leadership practices they utilize in their schools (Johnson & Christensen, 2017).

3.5.3 Sampling of Teachers

Teachers play a critical role in creating the school environment by facilitating instruction in their schools. Teachers facilitate learning and are in direct contact with the learners. Teachers were included in the sample as they were believed to be in a position to provide information on the instructional leadership practices adopted by their principals and how they influenced the academic environments in their schools. Using proportionate random sampling 72 teachers from the sampled schools were selected to participate in the study as indicated in Table 3.1 out of 369 teachers in public day secondary schools in the Sub- County. According to Johnson and Christensen (2017) proportionate random sampling enables larger clusters to be given larger chances of selection than smaller clusters. Thus, more teachers were drawn from schools with higher number of teachers. This is in line with Roscoes in Memon et al. (2020) who recommend a minimum of 50 respondents for each group if a population is broken into groups like the target population for this study that consists of principals, teachers and learners.

To select 72 teachers, the researcher obtained the names of teachers in each school and assigned each teacher a number. The researchers then wrote each number on a separate piece of paper, folded them, put them in a container and shuffled. The researcher then picked a number at a time without replacing until the desired number of teachers from each school was attained. The

numbers picked were then matched with teachers' names. The teachers were identified and requested to fill in the questionnaires.

Table 3. 2 Sample Size for Teachers

School	Population	Sample
A	15	6
B	12	5
C	20	8
D	12	5
E	15	6
F	20	8
G	13	5
H	14	6
I	15	6
J	18	7
K	13	5
L	13	5
Total	**180**	**72**

3.5.4 Sampling of Learners

The study targeted Form Four students in the sampled schools. The researcher argued that form four students are the senior most as they had had a longer stay in the school than students in other classes and could articulate issues on the subject of study.

The researcher selected 336 learners from the 12 sampled schools who formed 20% of the total students' population of 1697 in public day secondary schools in the sub-county using

proportionate simple random sampling as shown in Table 3.2. According to Nwana in Adekeye and Eleojo (2017) 20% of the total population of a few thousands is adequate.

To identify the 336 learners, the researcher obtained names from class attendance registers and assigned a number to each student. The researchers then wrote the numbers on separate papers, put them in a small container and shuffled them before picking a number at a time without replacing until the desired numbers was attained per school. The numbers picked were then matched with the corresponding names of students. The students were identified and requested to fill in the questionnaires.

Table 3. 3 Sample Size for Learners

School	Population	Sample
A	52	21
B	50	20
C	114	46
D	53	21
E	74	30
F	125	50
G	58	23
H	56	22
I	72	29
J	82	33
K	53	21
L	51	20
Total	**840**	**336**

3.6 Data Collection Instruments

The study utilized questionnaires, interview guides, observation schedule and document analysis schedules to collect data.

3.6.1 Questionnaires

There were two sets of questionnaires: teachers' and learners' questionnaires.

3.6.1.1 Teachers' Questionnaire

Teachers' questionnaire was semi structured. It contained both open and close ended questions. Open ended questions enabled the researcher to capture data from the teachers in their own language (Johnson & Christensen 2017) about their view of principals' instructional leadership practices and their influence on the academic environment. The questionnaire had a brief instruction on how to respond to the questions.

The questionnaire comprised of seven sections. Section A solicited teachers' biographic information such as gender, academic qualification, teaching experience and number of years spent in the current school. The study sought to establish the distribution of teachers by gender to determine if students of either gender had access to role models and whether there are attempts towards gender parity as teachers are expected to model behaviour for learners since public day secondary schools are co-educational. Teachers' academic qualifications were considered important as they informed the study whether teachers had the basic training that prepares them for teaching. Experience in teaching sharpens teachers' pedagogical skills, mastery of content as well as equips teachers with skills to enable them guide and counsel learners on academic and non-academic challenges. The period spent in the current work station was considered important as it informed the research whether the teacher can articulate issues related to instructional leadership and academic environment in their school.

Section B solicited information on goal setting, communication and sustenance. It solicited information on whether principals set goals for their school, how goals are set and strategies used in sustaining set goals. It also looked at how the set goal influences teaching practices and finally, it sought information on teachers' rating of principals' sustenance of the set goals.

Section C solicited information on monitoring instruction. It looked at monitoring as a twofold exercise that involves checking professional documents and lesson observation. The section

sought information on whether principals monitored instruction. It also sought information on how often professional documents are checked, whether principals observed teachers in class, how often lesson observation is conducted, whether feedback is given to teachers after observation, the timing of feedback given and whether feedback given to teachers is useful. The section also sought information on the influence of monitoring instruction on teaching practices adopted by teachers and lastly it collected information on teachers rating of principals' effectiveness in monitoring instruction.

Section D collected data on principals' promotion of teachers' professional development. The section sought information on whether principals support teachers' professional growth and strategies used by the principal to promote teachers' professional development. It also sought information on the influence of promotion of teachers' professional development on teaching.

Section E sought information on principals' efforts in promotion of collaboration among teachers. The section sought to determine whether principals supported teachers' collaboration. The section further sought information on areas of collaboration, influence of collaboration on teaching and the influence of collaboration on school academic environment.

Section F solicited information on availability, adequacy of teaching-learning resources and principals' influence on their utilization. The section solicited information on availability and adequacy of both physical and material resources. It also sought information on how principal influenced utilization of available resources and how this influenced teaching.

Lastly, section G consisted of a five point likert scale ranging from 1-5 where 1 denoted Strongly Disagree, 2 denoted Disagree, 3 denoted Neither Agree nor Disagree, 4 denoted Agree while 5 denoted Strongly Agree. The likert scale allowed the teachers to make judgements on their school academic environments (Nemoto & Beglar, 2014). The section also sought to

establish whether teachers had noticed any efforts by the principal to improve the school academic environment. Lastly, it sought teachers' opinions on areas that required improvement.

3.6.1.2 Learners' Questionnaire

The questionnaire was semi structured. It had a brief instruction on how to respond to the questionnaire. The questionnaire consisted of two sections.

Section A solicited information on principals' instructional leadership practices such as goal setting, influence on utilization of available resources and teaching and learning. Section B was a five-point rating scale which enabled learners to make judgement about their school academic environment and the areas that require improvement (Nemoto & Beglar, 2014).

3.6.2 Interview Guide

3.6.2.1 Interview Guide for Principals

The interview guide was unstructured. Unstructured interview guide was considered appropriate as it assisted the researcher to collect in-depth information (Dawson, 2007) on instructional leadership practices and academic environments. Interviews were considered appropriate for the study as they enabled the researcher to establish rapport with the principal. They also involved a face to face interaction between the principal and the researcher where issues were clarified through further probing.

The interview guide focused on instructional leadership practices adopted by principals. Specifically, it solicited information on how annual academic goals are set, communicated and sustained, how principals monitored instruction, promoted teachers' professional development, promoted collaboration among teachers and how principals' influenced utilization of available resources. Additionally, the interview guide also solicited information on the challenges faced in provision of conducive environments for teaching and learning. Further, the interview guide

solicited principal's biographic information such as academic qualifications, years of teaching experience, number of years served as a principal and number of years spent in the current station. Academic qualifications informed the study whether the principals had been trained as teachers. Experience as teachers was expected to inform the researcher whether the principal had the knowledge of what to expect from teachers regarding classroom practices. Experience as principals would inform the researcher whether principals had the required instructional leadership experience to enable them to: monitor instruction, promote teachers' professional development, enhance collaboration and to influence teachers and learners to utilize available resources effectively to support teaching and learning. Number of years spent in the current station informed the researcher whether the sampled principals had stayed long enough in their current stations to understand the academic environments in their schools and identify what needed to be improved.

3.6.3 Observation Schedule

To collect data on the physical environments of schools, the researcher used an observation schedule which mainly comprised of a check list. The researcher assessed availability, appropriateness and adequacy of physical facilities such as toilets, lockers, classrooms, laboratories, libraries, departmental offices, water points and furniture. Physical facilities enhance the school environment making it conducive for teaching and learning. These were rated on a three-point scale where one (1) meant Available, Very Appropriate or Quite Adequate, two (2) indicated not Available, Appropriate or Adequate while three (3) meant not Appropriate or Inadequate. Rating scale is a continuum with which different characteristics and phenomena can be measured. This enabled the researcher to make judgement on the school physical environments as a continuous construct (Albaum,You and Roster,2007)

The observation schedule enabled the researcher to assess other aspects that enhance the school environment such as display of academic goals, classroom arrangement, whether schools had

security personnel at their gate and the general appearance of the school. It was used during school visits. The schedule helped in collecting observation data that was checked for congruence with the self-report data in questionnaires and interview schedules (Johnson and Christensen 2017).

3.6.4 Document Analysis Schedules

This was used to assess principals' effectiveness in monitoring instruction. It assessed availability of professional documents such as schemes of work, lesson plans, records of tests, class registers, and records of work covered. Assessment of these documents provided information on teaching practices adopted by teachers, especially planning for instruction and syllabi coverage. The researcher sought to establish whether these documents were available, if they were updated regularly and endorsed by the principals, deputy head teachers or the heads of departments.

Preparation of schemes of work, lesson plans and lesson notes aid the teacher in planning for instruction. Planning for instruction gives the teacher an opportunity to master subject content, choose appropriate teaching strategies and resources. It also facilitates effective use of teaching learning resources and time. Properly planned lessons arouse learners' interest creating a lively teaching and learning atmosphere.

Class attendance registers were analysed to establish learners' regularity in school. Learners' class attendance gives them opportunity to interact with subject matter, teachers and other learners. Students note books were assessed to determine students' attention to school work which indicates whether learners are academically engaged or not. Data collected using document analysis schedules were used for corroboration with other data collected from teachers using questionnaires and principals using interview schedules (Johnson and Christensen 2017).

3.7 Data Collection Procedures

Upon successful defence of the research proposal the researchers obtained a research permit from the National Council for Science, Technology and Innovation (NACOSTI). After that she solicited the support of the respective principals whose schools were selected as part of the sample. Prior to data collection the researcher visited each of the sampled schools and introduced herself to the principal and the purpose of the study. Upon getting authorization the researcher explained to the principal what the study entailed and made arrangement on how to administer the instruments. Data collection from each school took the researcher three to four days.

3.7.1 Administration of Teachers' Questionnaires

The researcher approached teachers who had been selected to participate in the study, sought their cooperation and agreed on when the teacher would fill in the questionnaire. Teachers' questionnaires were administered during break or lunch times depending on teachers' availability. The researcher monitored the completion of questionnaires for each teacher and made clarification as was necessary. On average, it took each teacher forty-five minutes to fill in the questionnaire.

3.7.2 Administration of Learners' Questionnaire

For learners' questionnaires the researcher with the help of school principal, deputy principal or the teacher on duty asked the sampled learners to assemble in one classroom in each school after lessons from 3.30 p.m. The researcher then read out the questions one at a time as the students ticked the most appropriate response. On average learners took not more than half an hour to fill in the questionnaires. The questionnaires were collected from the respondents upon completion and checked for completeness before analysis.

3.7.3 Principals' Interviews

3.7.3.1 Training of Research Assistant

To assist in transcription of interviews the researcher recruited a research assistant. The research assistant was a trained teacher with a Bachelor of Education Degree. The research assistant was informed of his role and expected conduct during and after interviews with respect to the confidentiality of research data. The research assistant was expected not to discuss research data, reveal names of participants or their school or engage in discussions that would lead to their identification. The researcher took the assistant through each question in the interview schedule and pointed out the key issues to record on each aspect of the study during interviews. The research assistant was trained on use of codes and designation in identification of schools and respondents to ensure anonymity of data.

3.7.3.2 Collection of Interview Data

To interview principals, the researcher booked appointments with each principal beforehand and explained to them how the interviews were to be conducted and how data were to be recorded. The researcher and the research assistant met the principal in their respective schools at agreed times. Interviews were conducted in the principal's office and lasted on average between one hour to one hour and a half. With the help of the research assistant the researcher recorded principals' responses in a note book and also noted the key issues. Later the researcher compared her own notes with those of the research assistant and compiled interview notes that were incorporated into data collected using other instruments.

3.7.4 Observation Schedule

To make observations the principal or deputy principal in each school conducted the researcher around the school. The researcher noted aspects of interest in the observation schedule which mainly consisted of a check list. The researcher assessed availability, appropriateness and

adequacy of physical facilities (classrooms, toilets, lockers, staffrooms, laboratories among others) in each of the sampled schools as she ticked in the check list as was appropriate using the scale described earlier in section 3.5.3.

3.7.5 Document Analysis

For document analysis the principals availed the documents to the researcher or asked the deputy principal to assist. The researcher examined class registers, schemes of work, records of work covered, tests and note books for the year 2019. The researcher examined the documents in each school as she noted in the document analysis schedules whether documents were available, whether documents were updated regularly, and if they were endorsed by the relevant authority such as heads of departments or deputy principals. Data collected using document analysis schedules were corroborated with that collected using questionnaires, observation schedules and interview guides.

3.8 Data Analysis

All data from the field were checked for completeness before analysis. The analysis of the data was based on the research objectives. The researcher used both quantitative and qualitative analysis procedures.

3.8.1 Quantitative Data Analysis

For quantitative data the researcher coded the data and then used SPSS version 21 to generate frequencies, percentages, means and standard deviations in line with the study objectives

To test the hypotheses Pearsons Chi square (X^2) test of independence was used to establish whether independent variables (IV) and the dependent variable (DV) were associated. Chi square was considered appropriate because it enabled the researcher to test whether two nominal variables for instance goal setting and school academic environment are independent or associated (Saunders et al. 2009).

Hypotheses were tested at 0.05 level of significance which is the extent to which a researcher would be willing to risk rejecting the null hypothesis (Saunders et al. 2009). The researcher then compared the *P*-value with the level of significance (α) which is the benchmarks for accepting or rejecting the null hypothesis.

3.8.1.1 Quantitative Data Analysis Matrix

Table 3.4 indicates the research objectives of the study and the respective hypotheses. It enlists the statistic used to test the hypothesis and how the results were interpreted.

Table 3. 4 Quantitative Data Analysis Matrix

Objectives	Hypothesis	Type of test	Interpretation
a. Determine whether there exist association between goal setting and school academic environment.	**H_o1**: There is no significant association between setting annual academic goals and school academic environment.	Mean, Standard deviation, Chi square	If *p*-value is < than 0.05 reject null hypothesis else fail to reject
b. Examine the influence of monitoring instruction on school academic environment.	**H_o2**: There is no significant association between monitoring instruction and school academic environment.	Mean, Standard deviation Chi square	If *p*-value is < than 0.05 reject null hypothesis else fail to reject
c. Find out the influence of principals' promotion of teachers' professional development on school academic environment	**H_o3:** There is no significant association between promotion of teachers' professional development and school academic environment.	Mean, Standard deviation Chi square	If *p*-value is < than 0.05 reject null hypothesis else fail to reject
d. Find out the influence of principals' promotion of collaboration on school academic environment.	**H_o4**: There is no significant association between principal's promotion of collaboration amongst teachers and school academic environment.	Chi square Mean Standard deviation	If *p*-value is < than 0.05 reject null hypothesis else fail to reject
e. Establish principals' influence on utilization of available resources on school academic environment.	**H_o5**: There is no significant association between principal's influence on utilization of resources and school academic environment.	Chi square Mean Standard deviation	If *p*-value is < than 0.05 reject null hypothesis else fail to reject

3.8.2 Qualitative Data Analysis

Data from open ended questions in the questionnaires, document analysis guides, observation guides and transcriptions from interviews were summarised according to the research objectives. Data were coded based on recurring words and phrases. The researcher skimmed through the notes and identified main words and phrases. This involved labelling and grouping similar words and phrases together to generate themes. Conceptual analysis was used to assess the number of times certain concepts appeared in the data. Data that could be quantified were

put in frequency and percentage form and presented in tabular form for instance in table 4.4. Other data were classified according to themes and presented in narrative form.

3.9. Pilot study

For the pilot study, two schools which were not part of the sample were drawn from Kisii Central sub-county. According to Connelly (2008) a pilot test should be at least ten per cent (10%) of the units projected for the main study. Thus, two schools which form 16.7% of the sample were selected randomly from the target population for the pilot study. The results of the pilot study were used to assess the reliability and validity of the instruments and the results were used to revise the instrument before data collection. After the pilot study the researcher did away with focused group discussion guide on realising that there were no substantive heads of departments in the two schools used for pilot study. The researcher also changed the mode of recording interviews from use of electronic recording devices to note taking following the observation that use of electronic devices made principals uncomfortable.

3.10 Reliability and Validity of Data Collection Instruments

3.10.1 Reliability

The researcher utilized test re-tests method to derive the reliability index for the two sets of questionnaires. The researcher administered the questionnaires to five teachers (5) and ten (10) learners selected at random from each of the pilot schools. Each of the filled in questionnaire was marked with a specific code and the researcher kept a record of respondents' details and the code for the respective questionnaire filled in. The researcher waited for three weeks and re-administered the questionnaires to the same teachers and learners used in the test. The data collected using teachers' and learners' questionnaires were coded and keyed in SPSS version 21. The researcher then correlated the result of the test and re-test using Pearson Product moment correlation.

For teachers' questionnaire Section B generated a correlation coefficient of 0.9, Section C a correlation coefficient of 0.9, Section D a correlation coefficient of 0.7, Section E a correlation coefficient of 0.8 and section F a correlation coefficient of 0.7. The mean correlation coefficient was 0.82.

Learners' questionnaire had two sections: Section A generated a correlation coefficient of 0.92, and Section B a correlation coefficient of 0.93. The mean correlation coefficient was 0.935. A correlation index above 0.7 is adequate to confirm whether the variables of study are reliable (Sekaran & Bougie, 2009). Thus, the questionnaires were considered reliable.

3.10.2 Validity

To ensure that the questionnaires, interview guide, observation schedule, and document analysis schedules were valid, that is they measured what they purported to measure, the researcher consulted experts in education management to enhance content and construct validity. Peer reviews also enhanced face and content validity. Content validity of the data was also enhanced through methodological and source triangulation (Frankeal et al., 2012). Pilot test also enhanced the validity of instruments used for data collection by ascertaining clarity and suitability of language used in the instruments, relevance and appropriateness of questions in the questionnaires and interview schedules. The researcher used the results of the pilot test and the recommendations from education management experts to revise the instruments then reviewed the instruments before using them for data collection.

3.11 Ethical Considerations

The researcher obtained a research permit from the National Council for Science, Technology and Innovation offices. The researcher then visited the research site and solicited support from the gate keepers of the schools; principals. Once entry to each school and access to research sample units was granted by the principal the researcher sought the consent of teachers and

learners before administration of the research instruments. Further, the researcher explained to the respondents the purpose of the study, how the respondents were selected and why their participation was important. The respondents were informed that participation in the study was voluntary and that participation was free from any risk.

To ensure anonymity the respondents were asked not to write their names on the questionnaires. In the written report respondents are referred to using their designation while schools from which data were collected are identified using codes and not their names. The researcher refrained from making verbal and written reports during and after the study that would lead to identification of the participants.

The researcher ensured that the schools and the respondents' information were kept confidential during and after the study. Filled in questionnaires, interview notes, document analysis guides and observation guides were kept safely to avoid unauthorised access. Equally data sets in SPSS were secured with passwords which have been kept confidential to restrict unauthorised access. Data provided by respondents were used strictly for the purposes of research and the researcher has refrained from discussions that refer to the data collected or the research participants during data collection and after. The research assistant was also required to do so.

Interviews were conducted within the confines of the principals' offices to ensure privacy. The researcher sought principals' consent to record the interviews and went through the key issues raised in the interview with the principal before data collected through interview were analysed and incorporated in the study.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the study. The findings are organised according to the research objectives. The chapter contains eight major sections. The sections are: response rate, respondents' demographic data, influence of goal setting on school academic environment, Influence of monitoring instruction on school academic environment, influence of promotion of teachers' professional growth on school academic environment, promotion of collaboration, influence of utilization of resources on school academic environment, and hypothesis testing.

4.2 Response Rate

Response rate was considered for teachers' and learners' questionnaires. 336 learners participated in the study however, 14 questionnaires were discarded as they were incomplete and could not be used for the study, leaving 322 questionnaires which were considered for analysis. This represented a response rate of 96%. For the teachers 72 questionnaires were filled in and considered for analysis, representing 100% response rate. Principals from all the 12 sampled schools were interviewed and document analyses, as well as observations, were also carried out in the same schools. The response rate was considered adequate for further analysis as it was above the 80% threshold (Gall, Borg and Gall. 2007).

4.3 Demographic Information

The study sought demographic information from principals, teachers and learners. It sought information on gender of the respondents, teachers' and principals' academic qualifications as well as teaching experience and length of stay in their current stations.

4.3.1. Gender of the Respondents

The study sought to establish the gender of principals and teachers. Given that the study targeted sub-county schools that are co-educational, it is important to have role models for students of both genders. Information on the gender of principals and teachers is presented in Table 4.1.

Table 4. 1: Gender of the Respondents

Respondents	Gender	Frequency	Percent
Principals	Male	10	83.33
	Female	2	16.66
Teachers	male	46	63.9
	Female	26	36.1

n- Principals=12 Teachers=72

Table 4.1 indicates that there were 10 male principals in the sample accounting for 83.33%, while female principals were 2 accounted for 16.67%. This indicates that in the sampled public day secondary schools there were more male principals than their female counterparts. This shows that there is lack of gender parity in school leadership. This was replicated among teachers where more than half of the sampled teachers 46 (63.9%) were male while only 26 (36.1 %) were female.

The results indicate that there were more male than female teachers. Given the low number of female teachers, students in the sampled schools may not benefit from adequacy of female role models. Role models may play a great role in the development of students in secondary schools at a time when they are going through transition from childhood to adulthood. Teachers also play a critical role in helping students cope with non-academic challenges especially during adolescence when they undergo physical, social and emotional changes. Adequacy of role

models may influence students to utilize guidance services on academic and non-academic issues. Utilizing guidance and counseling services may provide encouragement and facilitate redress to issues hindering students from learning such as indiscipline and school attendance. This may enhance the academic environment and eventually academic attainment.

4.3.2 Teaching Experience

The study sought to establish principals' teaching experience. Out of the (12) twelve principals interviewed eleven (11) had a teaching experience of more than 25 years while one had taught for 22 years.

Teaching experience indicates that principals had had adequate teaching experience to understand the teaching practices in public secondary schools and what to expect from teachers for efficient and effective teaching. According to Mafuwane (2011) rich teaching experience enables principals to develop other teachers through mentorship and coaching. Adequate teaching experience may help principals understand challenges faced by teachers and how to address them. A rich experience in teaching may come in handy in supporting teachers to address their pedagogical issues. Teaching experience may enhance principals' ability to monitor instruction, to provide feedback that promotes teachers' professional growth and learning.

The study further elicited information regarding teaching experience of teachers. Teachers' responses are presented in Figure 4.1.

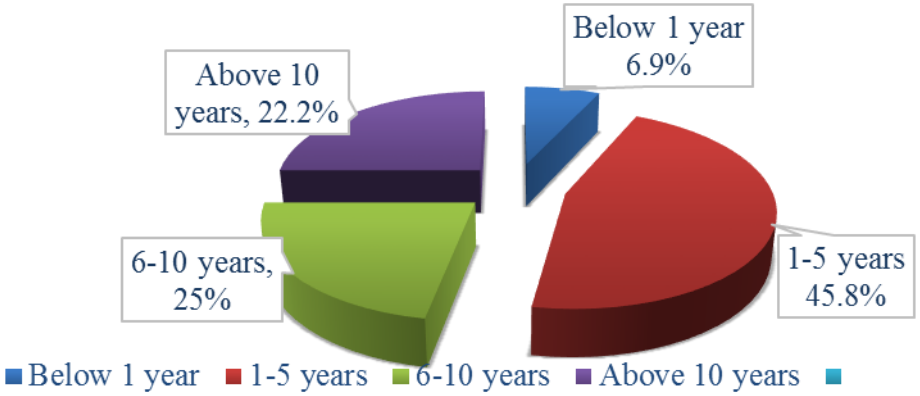

Figure 4. 1: Teachers Teaching Experience

Five teachers (5) forming 6.9% of the sampled teachers had less than 1 year teaching experience. Thirty-three (33) teachers representing 45.8% had taught for a period between 1 and 5 years while thirty-four (34) teachers representing 47.2% had more than 5 years teaching experience. This indicates that majority (93.1%) of the teachers had taught for a period exceeding one year.

The high percentage of teachers with teaching experiences of more than one year suggests that they could articulate issues related to instructional leadership and school academic environment. A majority of teachers indicating that they had teaching experience of more than a year suggests that they had enough time to observe and judge instructional leadership practices adopted by their principals and how they influenced school academic environment. Teaching experience provides the teacher with opportunity to master the subject content of their areas of specialization, identify challenges faced by students and develop appropriate teaching-learning strategies. They may also have mastered the art of classroom management. This way the teacher can enhance learning and eventually learners' performance as they have rich experiences to draw from and may have insights on areas to emphasize.

4.3.3 Experience as Principals

Further the study sought to determine the number of years the principals had served in that capacity. The findings indicate that 50% of them had served as principals for a period ranging from five to ten years while the remaining 50% had been principals for more than ten years.

The study shows that all the principals had more than five years' experience as instructional leaders. This suggests that they had had enough experience to develop competency in understanding principles of good instructional leadership, what to expect from teachers and learners as well as elements of a favorable school environment. The experiences would present opportunity for them to perform their instructional leadership roles effectively which include setting, communicating and sustaining academic goals, monitoring instruction, and cultivating teachers' professional growth, among other roles.

4.3.4 Academic Qualifications

The study solicited information on the academic qualifications of the principals. Out of the 12 principals who participated in the study seven (7) accounting for 58.33% had Bachelors degrees in Education, while 3 (25%) had Masters degrees in Education and two (16.67%) had Masters degrees in Business. In addition to Masters degrees in Business, the two principals had Bachelors degrees in Education. The result shows that 41.67% of the principals had Masters degrees while 58.33% had only Bachelors degrees. This suggests that the requirement by the Teachers Service Commission (TSC) that school principals should have a minimum of a masters' degree had only been fulfilled by 41.67% of the principals in the study. However, all the principals had undergone teacher training and were therefore expected to know the tenets of good teaching and what to expect from teachers.

Further, the study sought to establish whether teachers in the study had preliminary training that equips them with subject matter and pedagogy. Teachers' responses are presented in Table 4.2.

Table 4. 2: Teachers Academic Qualifications

Academic Qualification	Frequency	Percentages
Diploma in Education	8	11.0
Degree in Education	60	83.6
Masters Degree in Education	2	2.7
Any other	2	2.7

All the teachers that participated in the study qualified to teach at secondary school level as they had undergone training in education. 8 teachers, forming (11%) of sampled teachers had Diplomas in Education while 60 (83.6%) teachers had Bachelors degrees in Education, 2 (2.7%) teachers had Masters degrees in Education while 2 (2.7%) teachers had Bachelors degrees in Science and Post Graduate Diplomas in Education.

This indicates that all the teachers who participated in the study had gone through training that prepares them for teaching. Teacher training equips teachers with knowledge of the subject content in their areas of specialization, pedagogical skills and other areas that relate to students' issues such as guidance and counseling.

4.3.5 Length of Stay in the Current Station

Principals were asked to indicate the number of years they had spent in the current stations as principals. Only two (16.7%) principals had stayed for less than 5 years in their current stations. Eight (66.6 %) principals had spent between six and ten years while only 2 (16.7%) had spent more than ten years in their current workstations. Thus, majority of the principals (83.36%) had stayed in the current schools for more than five years.

The length of stay indicates that most principals had had time to understand the academic environments in their schools and identify what needed improvement so as to promote effective teaching and learning and eventually academic performance.

The study also revealed that only 4 (5.6%) teachers had been in their current stations for more than ten years, 12 (16.7%) teachers had been in their current schools for a period ranging between six and ten years while 38 (52.8%) teachers had stayed in the current stations for periods ranging between one and five years and the remaining 18 teachers accounting for 25% had stayed in their school for less than one year.

The results suggest that a majority of the teachers had stayed in the current schools for a considerable period of time and were able to articulate issues regarding principals' instructional leadership practices and issues related to academic environments in their schools. Additionally, they were able to understand professional, communal and socio-economic issues and challenges in their schools and adopt appropriate teaching practices suitable for each of their school's environments.

4.4 Influence of Principals Instructional Leadership Practices on School Academic Environment

The study sought to determine how instructional leadership practices influence the school academic environment. The study looked at five principal's instructional leadership practices namely: goal setting, monitoring instruction, promotion of teachers' professional growth, promotion of collaboration and influence on the utilization of resources.

4.4.1 Influence of Goal Setting on School Academic Environment

Teachers were asked whether principals set annual academic goals. Majority of teachers, 50 accounting for 69.4% of sampled teachers indicated that their principals set goals while 22 (30.6%) refuted the same. Similarly, learners were asked to indicate whether their principals set

annual academic goals where 286 accounting for 88.8% of the sampled learners, indicated that their principals set annual academic goals, while 36 (11.2%) indicated that they do not. This indicates that majority of the sampled teachers (69.4) and students (88.8%) confirmed that their principals set annual academic goals.

The teachers who indicated that the principals do not set annual academic goals were drawn from different schools. The fact that a portion of the sampled teachers (30.6%) indicated that principals do not set annual academic goals does not imply that there is any particular school where the principal does not set annual academic goals. The low numbers imply that only a few teachers do not participate in goal setting and are not aware of what happens in connection with goal setting. A second perspective is that the teachers are detached from the activities taking place in their schools. It may also point to lack of reference to the set goals during school activities such as assembly time and staff meetings as such forums would inform teachers who may not have participated in goal-setting what the set goal for the year is.

Students who indicated that their principals do not set goals were also distributed across all the schools in the sample. A small portion of students (11.2%) indicated that their principals do not set annual academic goals while their counterparts in the same school indicated that they did. Given that the portion that indicated that their principals do not set annual academic goals was small it may suggest that these were students who were detached from school and may have been absent on the days the school annual academic goal was set or lack of constant reference to the set goal.

4.4.1.1 Congruence in Stating Annual Academic Goal

The study sought to determine whether there was congruence in the goal indicated by the principal, teachers and learners in the same school. Principals, teachers and learners were asked to indicate the school annual goal in terms of a mean score or mean grade. In majority of schools

(10) studied principals, teachers and learners in the same school indicated different goals. There was incongruence in the goal stated among groups and between individuals in the same group. *In school G the principal reported verbally a different goal from the one indicated on the notice board.* While on the notice board the annual academic goal was 4 (C minus) the principal reported a mean of 3.1 which is D plain. In school H teachers and principal indicated the same goal (D plain). However, their learners not only had different goals from the teachers and the principal but each learner stated a different goal from their colleagues. It was established that 10 (83.3%) of the sampled principals reported different mean grades or scores from teachers and learners while the remaining 2 (17.7%) reported the same mean.

The incongruence indicates that there was lack of clarity of annual academic goals among principals, teachers and learners in the sampled schools. It further points out that there were systemic gaps in the communication of academic goals in the sampled schools. While majority of teachers and learners were aware that there was an annual academic goal to work towards it is apparent that it was not clear to them what the goal was. The incongruence in stating the set goals may also indicate that teachers and learners in some of the sampled schools do not participate in the goal-setting processes in their schools. When teachers and learners are involved fully in setting annual academic goal, there would be congruence in the stated goal, they would tend to own and identify with it.

Incongruence in stating annual academic goals by principals, teachers and learners may also point at lack of reference to set goals after setting it or failure to connect the day to day activities in the school with the set goal. Referring to the set goals frequently reminds teachers and learners of their role in attaining it. The incongruence in stating annual academic goals reflects the findings of Masuku (2011) where only prefects participated in goal setting and the clarity of the goal to students was uncertain.

Participating in goal setting may motivate teachers and learners to work towards the realization of the set goal. The importance of the clarity of the school goal is emphasized by Mafuwane (2011) who opines that a school goal should be clear to teachers so that effective teaching can take place. Clarity of the set goal helps teachers and learners to focus their attention and energies on teaching and learning respectively.

4.4.1.2 Display of Annual Academic Goals in Strategic places

Further the study solicited information on whether the set annual academic goals are displayed in strategic places in the school. This information was collected through observation which revealed that only 3(25%) schools displayed annual academic goals on common notice boards, classrooms and corridors while 9 (75%) schools did not. In school L the goal was displayed at the back of the form four classroom and in school C on the notice board in the corridor leading to the principal's office. In school G the goal was displayed on the school notice board.

Failure to display annual academic goals in strategic points in the school may explain the incongruence in stating set academic goals as earlier indicated. Displaying annual academic goals in critical areas such as classrooms, notice boards, along the corridors and pathways constantly reminds the teachers and learners of the ultimate goal for the year and prompts them to work consciously towards the achievement of the set goal.

The finding that only a quarter of the sampled schools displayed the set goal in visible areas within the school echoes Al Hosani (2015) who indicates that displaying school goals in critical areas was the least exercised activity of sustaining the set goal. Displaying annual academic goals in strategic places may inform teachers and learners who may not have participated in setting the goal what the set goal is. Additionally, it may constantly remind the principal, teachers and learners of the set goal and prompt them to work towards its attainment.

4.4.1.3 Goal Setting Process

The study further sought to determine how annual academic goals are set. Teachers were asked to indicate how annual academic goals in their schools were set. Table 4.3 indicates teachers' responses to the question '*How are the school annual academic goals developed?'*

Table 4. 3: Goal Setting

Goal setting process	Yes	No	Non Response
Principal sets goal alone	1(1.4%)	61(84.7%)	10(13.9%)
Goals are set at the departmental level	50(69.4%)	13(18.1%)	9(12.5%)
Goals are developed at the zonal level	7(9.7%)	48(66.7%)	17(23.6%)
Goals are given by County quality assurance officer	12(16.7%)	45(65.5%)	15(20.8%)
Principal involves teachers and learners in goal setting process	60(83.3%)	12(16.7%)	-

n=72

Table 4.3 indicates that one teacher (1.4%) indicated that the principal sets goals alone, 61 (84.7%) teachers indicated that principals do not set annual academic goals alone while 10 (13.9%) teachers did not respond to this item. Majority of the teachers, 69.4%, indicated that academic goals are set at the departmental levels. However, 18.1% indicated that they are not set at departmental level, while 9 (12.5%) teachers did not respond to this item. A few teachers, 9.7% indicated that goals are set at the zonal level. A large portion of the sampled teachers, 66.7% indicated that goals are not set at zonal level while 23.6% of teachers did not respond to the item. A small portion of teachers, 16.7%, indicated that annual academic goals are given by the County Quality Assurance and Standards Officer (CQUASO). The majority of teachers in

the sample, 62.5%, indicated that academic goals are not given by the CQUASO while 20.8% of the teachers did not respond to the item. Majority of the teachers, 83.33%, indicated that goal setting is a collaborative effort involving the principal, teachers and learners. A small section of the sample (16.7%), however, indicated that academic goals are not set through collaboration.

Principals were also asked how they set annual academic goals. Majority of the principals in the sample, 66.7%, indicated that they involved teachers and learners in goal setting. Principals explained that each student sets a goal per subject with the subject teacher. The subject teacher obtains the aggregate mean which is combined with the means for other subjects and then used to obtain the school mean. The remaining principals indicated that goals are set at the departmental level. Out of the 12 principals interviewed none indicated that they set annual academic goals alone, goals are given by the county quality assurance officer or are set at zonal level.

The findings show that majority of the sampled teachers (84.7%) indicated that principals do not set annual academic goals alone. This suggests that the principals in the sampled schools involved teachers and learners in setting annual academic goals. It is important to note that only one teacher indicated that the principal sets annual academic goals alone while the other five teachers sampled from the same school indicated that goals are set at departmental level and through collaboration between principal, teachers and learners.

The principal in the school where the lone teacher indicated that the principal sets goals alone also indicated that annual academic goals are set through collaboration with teachers and learners. A lone teacher indicating that principal sets academic goals alone may suggest that the teacher is detached from the activities taking place in the school. Detachment from school activities affects a teacher's work performance. This finding that principals in the sampled

schools do not set goals alone agrees with Kabeta et al. (2013) who assert that, although the principal is charged with the responsibility of ensuring that a school goal exists, he is not expected to set the goal alone, but to ensure that all the stakeholders are involved in goal setting. Involving teachers and learners in goal setting makes them own the goal and direct their efforts towards its attainment.

More than half of the sampled teachers (69.4%) indicating that goals are set at the departmental level suggests that there is collaborative effort in setting annual academic goals. Teachers who indicated that goals are not set at departmental level may not be taking part in departmental activities where annual academic goals are set. Another explanation may be that the teachers came from schools where there were no substantive departments as was the case in nine of the sampled schools.

Setting goals at the department level may prompt teachers to collaboratively work towards their attainment. When goals are set through collaboration between teachers and principals the process enhances teachers' efforts towards their attainment (Alig-Mielcarek, 2003). If teachers collaborate in setting annual academic goals they may hold each other responsible in working towards their attainment. Goals set through collaboration may also be more realistic and within the reach of teachers and learners

Majority of the teachers (66.7%) indicated that annual academic goals are not set at the zonal level. It is important to note that none of the principals interviewed indicated that goals are set at zonal level. Teachers who indicated that goals are set at the zonal level were drawn from different schools in the sample. Three (3) teachers came from one school while the other four (4) teachers came from four different schools. The responses may have come from alienated teachers who were detached from the activities in their schools as their principals and fellow teachers indicated that goals are set at the departmental level and through collaboration. It may

also suggest that their principals do not insist on their participation in goal setting process. Goals set at the zonal level may not be appropriate to all the schools as they may not put into consideration the uniqueness of individual schools. However, they may provide guidance to schools in setting their own annual academic goals.

Most of the teachers (65.5%) in the sample indicated that the annual academic goals are not given from the County Quality and Standards Office. This suggests that in most schools in the sample annual academic goals are set through collaboration between principals, teachers and learners. Teachers who indicated that annual academic goals were given by the County Quality Assurance Officer were drawn from different schools with three teachers coming from one school, two from the same school and the other seven (7), each came from a different school. It is important to note that their colleagues indicated that goals are set through collaboration between teachers, learners and the principals and at departmental level. The 12 teachers who indicated that annual academic goals are given by the County Quality Assurance Officer may not have participated in goal setting in their schools. It may also indicate that they are alienated teachers who do not identify with the activities in their schools and are not keen on what goes on in their schools. The principals, teachers and learners may not identify with a goal that is given by Quality Assurance Officer as they may feel that it has been imposed on them. They may not be motivated to work towards its attainment.

From the information gathered from the principals, teachers and learners, it is apparent that in most of the schools, goal setting is a collaborative venture involving the principal, teachers and learners. In some schools, goal setting is a multi-tier process where learners set goals per subject and from each subject, departments derive their goals which are aggregated to attain the final annual school goal. In some schools mean grades for each subject were obtained for the entire class, aggregated and adopted as the school goal. Where there was more than one form four class the mean for the two classes was used as the school goal. Involving teachers and students

in setting annual academic goals may make them identify with the set goal and therefore work towards their attainment. Additionally, the set goals are likely to be realistic as the stake holders may consider all the factors that may influence their attainment. The finding of the study corroborates the findings of Al Hosani (2015) that goal setting tended to be a collaborative effort between teachers and principals. Involving teachers and learners in goal setting helps them to identify with the set goal and to commit themselves to work towards its attainment. Failing to involve teachers and learners in goal setting may not influence teachers to work towards attainment of the set goal.

4.4.1.4 Students' Role in Goal Attainment

Students were asked to state what they were doing to ensure the attainment of the school goal, 264 (82%) students responded to the question indicating that they were working hard by revising thoroughly and attending school regularly while 58 (18%) failed to respond to the question. The finding indicates that most students in the sampled schools work towards attaining set annual academic goals. Students' responses suggest that most students engage in activities geared towards realising the set annual academic goal. Students' responses may support principals 'and teachers' assertions that goal setting is a collaborative activity as working towards the realization of set goals may indicate that learners were aware that there were set annual academic goals.

4.4.1.5 Factors Considered in Goal Setting

The study sought to establish from the principals the considerations made by principals in setting annual academic goals in their schools. Majority of the principals (66.7%) reported that they considered students' entry behaviour, available resources and the number of teachers in the school. Performance in the previous year's K.C.S.E was mentioned by 25% of the

principals, while 8.3% of the principals indicated that performance in the most recent examination is the key consideration in goal setting.

From principals' responses, it is apparent that the goal setting process is informed by a number of factors. Majority of the principals (66.7%) reported students' entry behaviour as the major factor considered in setting annual academic goals. Students' entry behaviour may be a pointer of their future performance. Given that day secondary schools majorly admit students at the bottom of the performance pyramid in K.C.P.E, considering the entry behaviour indicates that the goals set may be low. However, secondary schools should be committed to adding value to students' academic lives. Learners should be guided in goal setting so as not to set very high or low goals that are not realistic. The results of this study agree with Masuku (2011) and Al Hosani (2015) findings that goal setting should be data driven. Basing the set goal on data on students' performance in previous examination and entry behaviour ensures that the set goals are realistic and are within reach for teachers and learners. In advancing the argument that goal setting should be data driven, Sinay, (2016) emphasize that the set goal should be realistic in order to motivate students. If goal setting is not informed by existing data on performance the set goal may be out of reach for teachers and learners and may demoralize them. However, goals should be challenging enough to motivate teachers and learners to work towards their attainment.

4.4.1.6 Influence of Goal Setting on Teaching Practices Adopted by Teachers

The study solicited information on how the set goals influence teaching. Majority of the teachers, 94.4%, reported that setting goal influences syllabi coverage, 2.7%, indicated that it does not influence syllabi coverage, while 2.7% did not respond to this item. On whether the set goal influences feedback given to learners, 72.2% of teachers indicated that it does, 19.4% indicated that it does not while 8.33% of the teachers did not respond to this item. Majority of

the teachers 76.4% indicated that the set goal influences classroom management, 19.4% indicated that it does not while 4.2% of the teachers did not respond to the item.

On whether the set goal influences the number of tests administered to the students, the majority of the sampled teachers, 70.83%, responded in the affirmative, 22.22% indicated that it does not, while 6.94% of the teachers did not respond to this item. Regarding the set goal influencing the teaching-learning methodology adopted, 72.2% of the teachers indicated that it does, 18.05% indicated that it does not, while 9.7% of teachers did not respond to this item.

Responses from the majority of the teachers (94.4%) in the sample that the set goals influence syllabi coverage imply that goals enhance teachers' frequency in class as well as the utilization of teaching-learning time. Effective utilization of teaching-learning time enables the teacher to cover the syllabi within the stipulated time. Covering the syllabus would give the learners opportunity to master the subject content, which, in turn is likely to enhance learning and eventually performance in examinations.

Although majority of teachers in the study (72.2%) agreed that the set goals influenced the feedback given to the learners the number of teachers was lower than those who indicated that it influenced syllabi coverage. Incorporation of feedback in teaching communicates to the learners what the teacher expects of them. Majority of teachers indicating that the set goals influenced the feedback given to students suggests that the teachers would be careful about how they package the feedback and would tailor it to guide and motivate students to work towards set goals. Similarly, majority of the teachers (76.4%) indicated that the set goal influenced classroom management. Classroom management ensures that teaching-learning time is utilized in teaching and learning by minimizing disruptions. Additionally, an organised classroom enables teachers to access every learner in the class and to offer individualized attention as may be appropriate. This result supports findings by Sinay (2016) that the set goal prompts the teacher to reflect on their professional practice with the intention to improve teaching and

classroom management. When teachers are effective in classroom management it indicates that they are keen in planning their lessons by including activities that fully involve learners and sustain their attention throughout the lesson.

Fewer teachers (70.83%) indicated that goal setting influences the number of tests administered compared to other aspects of teaching. This may be attributed to the fact that schools may have a predetermined number of tests learners should be subjected to within a term. However, a teacher may still exercise discretion on the number of tests administered to students. Administration of tests helps the teacher to assess the progress made towards attainment of set goals and mastery of content taught and thus may assist the teacher to plan for future lessons. It also provides data that can inform decision making for improvement of instruction.

4.4.1.7 Sustaining Annual Academic Goals

Goal setting cannot be said to be complete if the principals do not follow it up with actions.

The study sought to determine from teachers the activities that the principals engage in to sustain annual academic school goals. Teachers' responses to the question: *On a day to day basis what activities does your principal engages in so as to sustain school annual academic goal*? are presented in Figure 4.2.

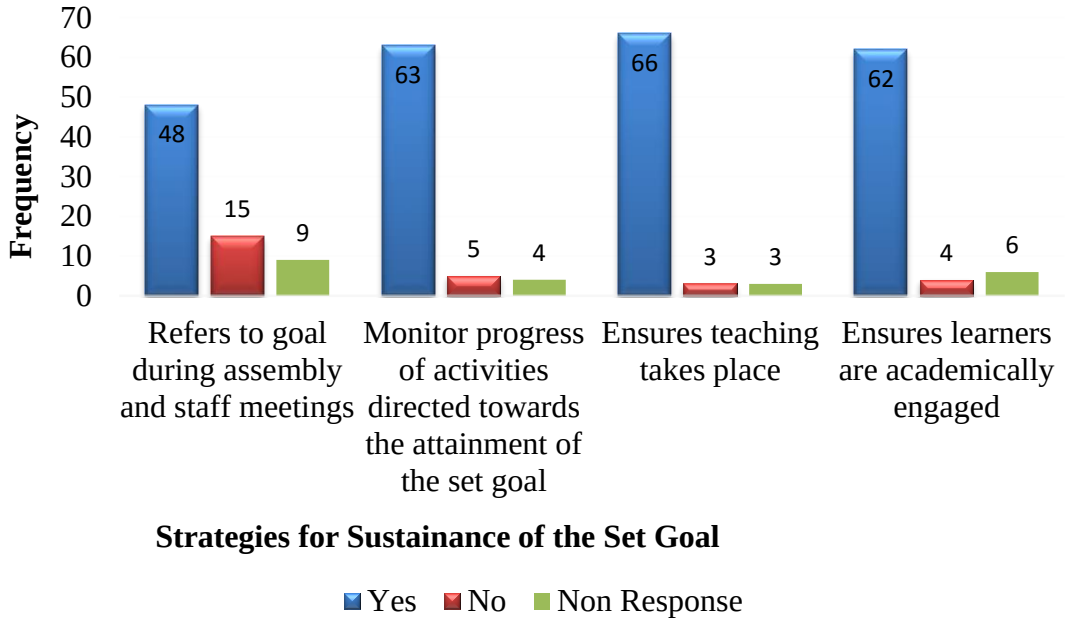

Figure 4. 2: Sustenance of the School Goal

Figure 4.2 indicates that 48 (66.67%) teachers reported that the principal referred to the set goal during school assembly and staff meetings, 15 (20.83%) indicated that they do not while 9 (12.5%) teachers did not respond to the item. Majority of the teachers, 63 (87.5%) indicated that principals monitored the progress of activities directed towards attainment of school academic goals. However, 5 (6.94%) teachers indicated that the principals do not while 4 (5.55 %) teachers did not respond to this item. Almost all the teachers in the sample, 66 (91.7%) indicated that their principals ensured that teaching takes place. However, 3 (4.17%) teachers indicated that they do not while the same number of sampled teachers did not respond to this item.

The same information was gathered from principals through interviews. Seven principals accounting for 58.33% of the sampled principals mentioned that students filled in teachers lesson attendance register (TLAR) while the remaining five (41.67%) did not. Further, 9 principals (75%) reported that they monitored teaching by ensuring that teachers followed the teaching time table by walking around and popping into classrooms while another three (25%)

indicated that they had delegated the task of ensuring teaching takes place to their deputy principals. Additionally, lesson recovery forms were filled to indicate how lost teaching-learning time was recovered.

On whether the principals ensured that learners are academically engaged, 86.11% of the teachers responded in the affirmative, 5.56% of the teachers indicated that they did not while 8.33% did not indicate whether the principal ensured that learners are academically engaged or not. During Interviews with the principals one of them reported checking students note books which ensures that students are academically engaged.

The findings also show that the majority of teachers (87.5%) affirmed that principals monitored activities geared towards attainment of school goals as a strategy for sustaining the school goal.The activities that the principal may engage in to promote attainment of the set goal include monitoring teaching and learning by collecting and evaluating data on syllabi coverage, class attendance and students' performance in internal examinations such as monthly, mid term, end of term and year tests. Monitoring such activities enables the principals to assess progress made towards the realization of set annual academic goals and take the most approprite actions. Principals' responses indicated that they not only ensured that teaching takes place but used more than one strategy to do so. In advancing this argument Sciullo (2016) notes that principal should not only assess progress made towards goal attainment but should communicate the same to teachers with whom s/he should collaboratively identify strategies of bridging the gap between what has been achieved and the desired outcomes.

Majority of the teachers (91.%) indicated that their principals ensured that teaching takes place. In the majority of the schools in the sample, class monitors filled in Teachers lesson attendance registers and handed them to the deputy principal who analysed them and gave them to principals for further actions. Interviews with principals confirmed that principals were emphatic on teaching as they were enforcing the implementation of teachers lesson attendance

registers (TLAR) which monitor teachers' class attendance and whether home work is given. The register also collects data on utilization of teaching-learning time.This result suggests that principals ensured that teaching takes place. Teaching ensures sylabi coverage thus equiping learners with the required knowledge. This finding negates a finding by Weber (1987) that principals neglected supervision of implementation of the curriculum by devoting little time and energy for the practice even though this is one of the major roles they are expected to play. Supervision of the curriculum plays a critical role in ensuring that classroom teaching is aligned to the set academic goals.

The result also indicates that the majority of the sampled teachers (86.11%) affirmed that their principals ensured that students were academically engaged. One way through which an instructional leader can ensure that students are academically engaged is by checking students' note books. One of the principals mentioned having checked students note books to monitor instruction.Students who are academically engaged attempt classwork and homework . Such students are less likely to be absent from school. In line with the above finding, Sinay (2016) argue that for learners to be academically engaged, principals should facilitate the development of realistic goals that influence adoption of teaching-learning strategies that fully involve the learner. The importance of having academically engaged students is underscored by Blum (2005) who posits that it enables them to be connected to teachers, other students and their school which results in improved school attendance learning and academic attainment.

This result further shows that a smaller portion of teachers (66.7%) indicated that principals referred to the set goal during assemblies and staff meetings as one of the strategies for sustaining annual academic goals. Other than ensuring that the day to day activities in the school are directed towards attainment of the set goal the principal should constantly remind teachers and learners about the set goal to cultivate ownership and commitment among them. Refering to set goals during assembly and staff meetings constantly reminds teachers and learners of

what the school academic goal is and prompts them to concentrate on tasks that lead to its attaiment (Holmberg, 2014).

It is interesting to note that teachers that indicated that their principal does not refer to the set goals during assembly and meetings were distributed in six schools. Teachers who indicated that their principals do not refer to the set goal may be normless teachers who may be detached from the school activities and may not identify with the set goal.Compared to the rest of the strategies reference to the set goal during school assembly and staff meeting was the least practiced strategy for sustaining school goals. This may also explain the incongruence in stating the set goal between principals, teachers and students drawn from the same schools. Constant reference to the set goals reminds teachers and learners of their role in attaining the set goals.

Keeping the goal alive throughout the period for which it is set calls for cultivation of a collective responsibility towards attainment of the goal. Principal should not only hold teachers responsible for the set goal but learners as well. All members of the school should collaboratively work towards attainment of the set goal. Learners are motivated when they know that teachers and principals support the set goal and may devise strategies of ensuring its attainment.

4.4.1.8 Strategies adopted by Principals to Inspire Teachers to Work Towards the Set Goals.

To establish strategies adopted by principals to influence teachers to work towards set goals the question' *How do you inspire teachers to work towards set academic goals* was posed to the principals during interviews. Principals responses are presented in Table 4.4.

Table 4. 4*: Strategies Adopted by Principals to Motivate Teachers*

Strategy	Yes	No
Verbal appreciation	2(16.67)	10(83.33%)
Issuance of recommendation letters.	2(16.67%)	10(83.33%)
Use of resource personnel	4(33.33%)	8(66.67%)
Rewards	4(33.33%)	8(66.67%)
Mentorship and team teaching	2(16.6%)	10(83.33%)

n=12

Table 4.4 indicates that 16.67% of the principals motivated teachers who completed the sylabus on time through verbal recognition during assembly while the same portion of principals did so through issuance of recommendation letters. Four principals (33.3%) reported that they brought in resource personnel to work with teachers. An equal portion of principals indicated that they liased with the Board of Management to reward teachers of the best performed subjects in K.C.S.E. Teachers of the best performed subject in internal assessments were also rewarded.

Two principals accounting for 16.7% of the sampled principals indicated that they mentored teachers by acting as pacesetters who influenced teachers by being exemplarly in their own teaching.One of the principals indicated that talking to teachers on indivindual basis encouraged them to bring out the best in them as teachers, while another indicated that teachers were informed of their roles and what they are expected to do. The findings indicate that rewards and use of resource personnel were the most prevalent strategies used by principals in motivating teachers to work towards set goals. While the use of resource persons may influence the teacher to adopt appropriate teaching strategies that create more learning opportunities for the learners rewarding teachers serves as extrinsic motivation which may enhance their work performance.

Recognition before fellow teachers and students although practiced by only two principals in the sample may ignite teachers ethusiasm to work towards set goals. Additionally, this may boost teacher's confidence and learners' trust in the teacher which may create more learning opportunities for the learner. It may also motivate other teachers to emulate the recognised teacher.The principals should however be careful not to spark jealousy and animosity amongst teachers. Two principals indicated that they encouraged teachers by teaching their areas of specialization alongside other teachers. Taking part in team teaching helps principals inspire teachers to emulate them in being examplary in teaching.This finding is in line with Stronge, et al. (2008) who opine that principals should model expected behaviour for teachers to emulate.This may act as motivation for teachers to be more focused in their teaching. Additionally, team teaching enlightens the principal on how to support teachers to be effective in teaching.Team teaching that is based on preference of topics ensures that learners benefit from a wide base of expertise. In the same trend indivindualised mentorship addresses the teacher professional needs.This may go along way in motivating teachers to work towards achivement of set goal. According to Department of Education (2008) professional conversations with teachers help pricipals to exert their influence on teachers and provide an opportunity for the instructional leader and the teacher to discuss specific challenges faced by the teacher and how to overcome them.

4.4.1.9 Strategies adopted by Principals to Inspire Learners to work towards Set Goals.

Principals were asked how they inspired learners to work towards the set goals. All the 12(100%) principals indicated that they rewarded and recognised learners verbally for good performance in internal examination. This was further confirmed by majority of the sampled students (81.7%) who agreed with the statement that the '*principal rewards good performance*'. One principal further indicated that Form Four students were addressed immediately after the

release of results for internal examinations. Rewarding students for good performance reinforces the spirit of hard work. This finding echos finding byAI Hosani (2015) that the instructional leader should reward students for good performance. Equally verbal praise and recognition enhances learners' morale to work towards set goals.

According to Harvey and Holland (2011) an effective leader should not only set high academic standards for learners but also inspire them to achieve them. Addressing students after the release of internal assessment was also mentioned as one way of inspiring learners. The address may point out the areas to celebrate and those that require improvements. Further, two principals explained that the school had set structured groups where students were expected to work as academic families. The principal in school K explained, " *We have formed academic families where each teacher in the school is a surrogate parent to a number of students. The teachers meet regularly with the students assigned to them to discuss any challenges students may be experiencing in their academics*".

Working in groups fosters sharing of ideas where students can benefit from one another and may provide support for weaker and struggling learners. Other that promoting learning belonging to a group overseen by a teacher may give learners sense of belonging and safety depending on teacher's support. Assigning students to teachers and holding teachers accountable for learners academic progress may incalcate a sense of belonging (Blum,2005). In advancing this aurgument Schap (2005) observes that attachment with school encourages school attendance and attention to school work as well as reduce indisciplene.

4.4.1.10 Teachers' Ratings of Principal's Effectiveness in Sustaining Academic Goals

Teachers were asked to rate the effectiveness of the principals in sustaining the school goal using a five-point scale where 1 denoted very ineffective, 2 denoted ineffective, 3 denoted don't

know, 4 represented effective and 5 indicated very effective. Their responses are shown in Table 4.5.

Table 4. 5: Principals' Effectiveness in Sustaining School Annual Academic Goals

Statement	Frequency	Percentage
Very ineffective	6	8.3
Ineffective	4	5.6
Don't know	10	13.9
Effective	47	65.3
Very effective	5	6.9
Total	**72**	**100.0**

From Table 4.5, majority of teachers, 65.3%, rated their principals as effective in sustaining the schools' annual academic goals while 6.9% of the teachers rated their principals as very effective. A small portion of teachers, 5.6%, indicated that their principals were ineffective while 8.3% of the teachers rated their principals as very ineffective in sustaining the set goal. The remaining 13.9% of teachers were undecided as to whether principals were effective or ineffective in sustaining the school annual academic goal. This indicates that majority of the teachers,72.2%, considered their principals as effective in sustaining school academic goals, 13.9% of teachers indicated that principals were not effective while an equal portion were undecided as to whether principals were effective or not in sustaining the set annual academic goals.

Teachers who rated the principals as effective explained that principals monitored teaching and learning, learners' performance and ensured adequate coverage of the syllabi. One teacher explained that the principal availed resources required for teaching and learning and motivated teachers and learners to work towards attainment of the set goal. Setting expectations for

teachers and learners was also mentioned as one way used by principals in sustaining school academic goals. When the principal communicates what is expected of teachers and learners it prompts them to focus their efforts towards meeting the expectations. The expectation may be articulated as what teachers and learners need to do to ensure attainment of school academic goal.

The importance of sustaining the set goal is underscored by Mafuwane (2011) who observed that the principal should live the school goal as it gives the school direction. This suggests that goal setting in itself may not impact teaching and learning unless it is shared with teachers and learners and kept alive throughout the year. Sustaining school annual academic goal requires the principal to direct the day to day activities towards attainment of the set goal. It calls for the principal going beyond setting and communicating the set academic goal to teachers and learners to following up on activities directed towards the attainment of the set goal as well as conducting periodic review of such activities. The principal has to translate the goal into small tasks that can be carried out daily or monthly such as lesson observation and holding meetings with teachers to discuss activities directed towards attainment of set goals. The principal as the chief instructional leader should also conduct regular reviews on the activities directed towards goal attainment such as class attendance and syllabi coverage.

4.4.2 Influence of Monitoring Instruction on School Academic Environment

Monitoring instruction is a twofold instructional leadership practice that involves checking professional documents and lesson observation. Teachers were asked whether their principals monitored instruction. Slightly more than a half of the sampled teachers (56.9%) indicated that their principals monitored instruction, while the remaining 43.1% indicated that they did not. The majority of the teachers indicated that principals monitored instruction. Principals are charged with the responsibility of monitoring instruction in their schools. However, the principal can delegate the task to deputy principals or heads of departments. It is important to

note that teachers who indicated that their principal does not monitor instruction were distributed in different schools.

4.4.2.1: Strategies Adopted by Principals to Monitor Instruction

To establish the strategies adopted by principals in monitoring instruction the researcher posed the question" *How do you monitor instruction*?" Principals' responses are presented in Table 4.6.

Table 4. 6: Strategies Utilised by Principals to Monitor Instruction

Strategy	Yes	No
Use of teachers' lesson attendance registers	7(58.33%)	5(41.67%)
Lesson observation	2(16.67%)	10(83.33%)
Delegation	4(33.3%)	8(66.7%)
Paying impromptu visits to classes during lessons	3(25%)	9(75%)
Checking students note books	1(8.3%)	11(91.7%)

n=12

Table 4.6 indicates that more than half of the sampled principals, 58.33%, indicated that they monitored instruction by checking teachers' lesson attendance registers filled in by class monitors. The seven principals explained that the filled in teachers' lesson attendance registers are checked daily by deputy principals and handed to the principal on weekly basis for action. The principals who used this method of monitoring instruction explained that teachers who fail to attend classes are asked to make up for the lost time and fill in lesson recovery forms.

A small portion of the sampled principals (16.7%) mentioned that they monitored instruction by observing teachers in class. Another third of the principals, (33.3%), indicated that they had delegated monitoring instruction to the deputy principals. The four (4) principals who indicated that they had delegated monitoring of instruction explained that deputy principals checked

professional documents. This was confirmed by data collected through analysis of documents that showed that checking professional documents was a shared responsibility between principals, deputy principals and heads of departments in most of the studied schools. A quarter of the principals, (25%), mentioned that they paid impromptu visits to classes and met regularly with teachers to review progress on syllabus coverage. One (1) of the principals indicated that monitoring of instruction was realised by checking students' note books.

Table 4.6 indicates that principal employed different strategies to monitor instruction. It is important to note that some principals employed more than one strategy of monitoring instruction. Use of Teachers Lesson Attendance Register (TLAR) seemed very popular as a strategy used to monitor instruction. This may be because it is an important tool for teachers' performance appraisal which is a role performed by the principals. Teacher's lesson attendance register records the time the teacher clocks in and out of class, the topic covered, whether teachers give homework or not. TLAR as a strategy informs the principal whether teachers attend class, teachers' efficiency in utilization of teaching-learning time and whether teachers engage learners academically by assigning home work.

Lesson observation was mentioned by only two (2) of the studied principals. This indicates that majority of the principals in the sample did not engage in lesson observation. Lesson observation informs the principal about what is going on in the classroom and can also inform the principal of teachers' effectiveness or challenges in teaching. Although lesson observation is involving, it provides opportunity for the principal to not only monitor implementation of the curriculum but also to assess teachers' capacity to teach. This finding converges with the findings by Manaseh (2016) that head teachers did not devote time to observe teachers in class which resulted in poor coverage of the syllabi. Lesson observation not only ensures that teaching and learning takes place but also that the appropriate methodologies are applied to deliver the right content to learners. A third of the principals mentioned having delegated

monitoring instruction to the deputy principals who do so by checking professional documents. This shows that majority of the sampled principals did not delegate monitoring of instruction. Checking documents alone may not be sufficient in monitoring instruction because it does not depict what happens in the classroom. However, it informs the instructional leader what the teacher has planned to cover within certain durations of time.

Paying impromptu visits to the classroom was mentioned by a quarter of the principals (25%) in the study. This was further underscored by majority of students (61.2%) in their 'responses to the statement '*principal visits class while teaching is on-going*.' Although paying impromptu visits may depict what is going on in the classrooms, inform the principal whether teachers attend classes or not and whether students attend school, it may not inform the principal about teacher's efficacy and it may disrupt classes as learners' attention may be drawn to the principal entering classroom in the middle of the lesson.

Checking students' notebooks was the least preferred strategy of monitoring instruction as it was mentioned by only one of the sampled principals. It may inform the principal whether teachers attend classes and whether they assign class and home work to students and whether the assigned work is marked or not. Checking students' note books may, however, not depict the right situation if the principal samples books from students who do not attend school regularly or attend school but do not attempt assignments given. Additionally, a teacher may assign students work and not teach. It is important to note that the principal who monitored instruction by checking students' note books also reported use of delegation and teachers' lesson attendance registers. This shows that utilising one strategy is not adequate in monitoring instruction. It is important for principals to blend in several strategies so as to effectively monitor instruction

4.4.2.2: Influence of Monitoring Instruction on Teaching Practices

The study sought to establish from the teachers whether monitoring instruction influenced teaching. Majority of the teachers, 66 (88.9%) indicated that monitoring instruction influences teaching, while 8 (11.1%) teachers indicated that it does not. These findings affirm that monitoring tends to influence teaching rather than not. Monitoring instruction influences teaching when it is tailored to enhance teachers work performance. The influence of monitoring instruction can only be realised if it is tailored to promote teachers' growth in their area of specialisation and to create more learning opportunities for learners. Monitoring instruction may influence teaching if teachers are given feedback after observation or after checking their professional documents. This is further underscored by Nzobonimpa (2011) who sees importance of monitoring instruction as enabling teachers to be more careful about teaching. Monitoring instruction prompts the teacher to plan carefully on how to deliver the subject matter appropriately to the learners. Additionally, it challenges the teacher to go out of his way to ensure that subject matter is presented effectively to promote learning.

4.4.2.3: Aspects of Teaching influenced by Monitoring Instruction

The study further sought to establish from teachers' aspects of teaching influenced by monitoring instruction. Teachers' responses are presented in Figure 4.3.

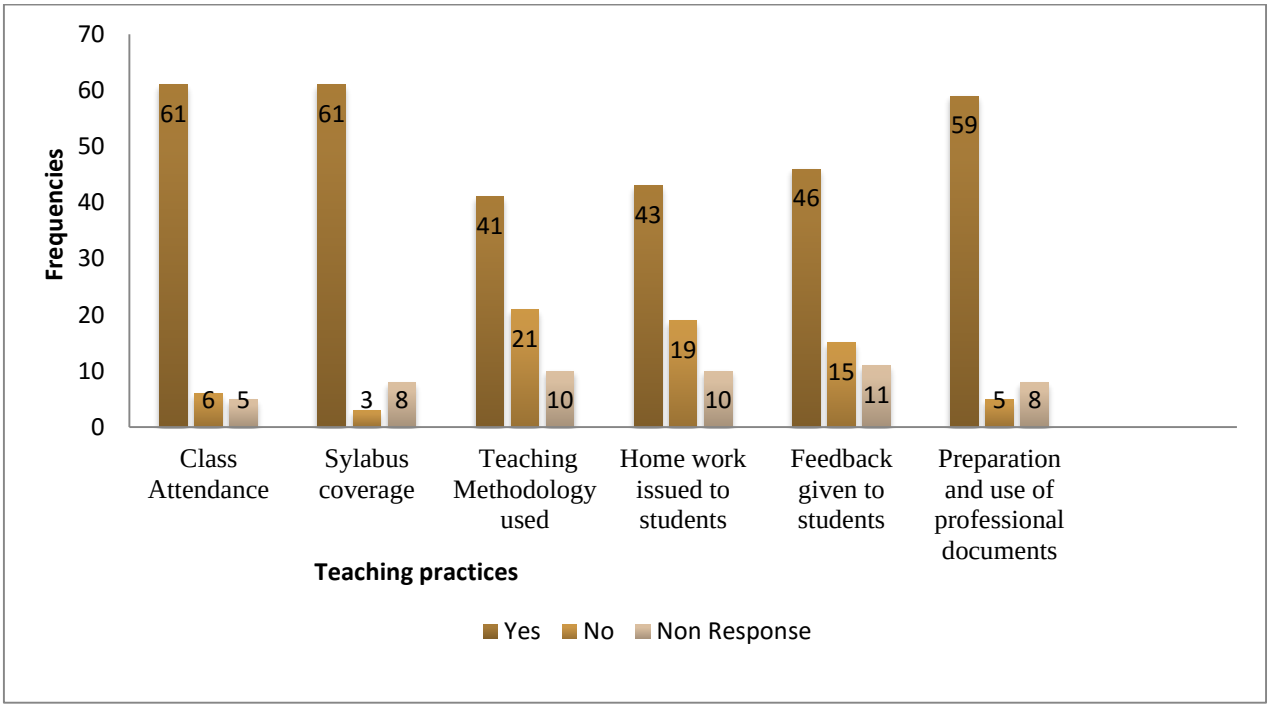

Figure 4. 3: Teaching practices influenced by monitoring instruction

Figure 4.3 shows that 61 (84.72%) teachers indicated that monitoring instruction influenced class attendance. A small portion of the sampled teachers, 6 (8.33 %) indicated that it does not while 5 (6.94%) teachers did not indicate whether monitoring instruction influences class attendance or not. On whether monitoring instruction influences syllabi coverage 61 (84.72%) teachers responded in the affirmative, 3 (4.17%) negated, while 8 (11.11%) teachers did not respond to this item. Slightly more than half of the teachers, 41 (56.9%) indicated that monitoring instruction influences the teaching methodology adopted, 21(29.1%) teachers indicated that it does not, while the remaining 10 (14%) teachers did not respond to this item.

On whether monitoring instruction influenced the homework given to students, 43 (59.72%) teachers indicated that it does, 19 (26.39%) teachers indicated that it had no influence on homework given to students, while 10 (13.89%) teachers did not respond to this item.

More than half of the teachers, 46 (63.9%) indicated that monitoring instruction influences the feedback given to students. However, 15 teachers accounting for 20.83% of the sampled teachers indicated that monitoring instruction does not influence feedback given to students

while the remaining 11(15.28%) teachers did not indicate whether monitoring instruction influences feedback given to learners or not. Nearly all the teachers, 59 (81.94%) indicated that monitoring instruction influences preparation and use of professional documents. However, 5 teachers accounting for (7%) indicated that monitoring instruction does not influence the preparation of professional documents while 8 (11.11%) teachers did not respond to the item.

The study shows that a large portion of teachers (84.72%) indicated that monitoring instruction influenced class attendance and syllabi coverage. The high percentage of teachers indicating that monitoring instruction influences class attendance and syllabi coverage may be attributed to the recently implemented Teachers' Performance Appraisal and Development (TPAD) where class attendance is a key component. Class attendance provides an opportunity for teachers to interact with learners and to cover the syllabi. Monitoring instruction may influence syllabi coverage where teachers are held responsible for effective syllabus coverage within the stipulated time lines. This may require the instructional leader to conduct periodic review of the progress made in syllabus coverage and hold teachers responsible for timely coverage of the syllabus. Syllabi coverage helps the teacher and learner to work towards the set academic goals by exposing the learner to the subject matter that they are expected to master. Additionally, the more content is covered the more the students may learn and the more likely they are to perform better in examinations.

Slightly over a half of the teachers (56.9%) in the sample indicated that monitoring instruction influences choice of teaching methodology adopted. Adoption of appropriate teaching-learning methodology enhances teachers' effectiveness as well as learners' opportunities to grasp the subject matter. A considerable portion of the sampled teachers (29.1%) indicated that monitoring instruction does not influence the choice of teaching-learning methodology adopted. This is perhaps because the teacher is expected to choose an appropriate teaching methodology to maximise learning. An appropriate teaching-learning method motivates learners to

participate in learning by sustaining their attention for the period stipulated for the lesson (Groves and Welsh, 2010). Choosing an appropriate teaching-learning methodology is important as it ensures that learners are academically engaged. Academically engaged learners achieve more academically.

Slightly over a half of the sampled teachers (59.2%) indicated that monitoring instruction influences homework given to students. The percentage of teachers indicating that monitoring instruction influences homework given to students, ties well with strategies utilised by principals to monitor instruction. Only a section of principals reported using teachers' lesson attendance register TLAR and only one principal mentioned checking students note books to monitor instruction. Data collected using document analysis indicated that teachers were not so keen in assigning and marking homework. The teachers' lesson attendance register (TLAR), which was said to be used for monitoring instruction by the principals, seeks information on whether teachers give homework. Homework reinforces what is learnt in class. It also gives the learner an opportunity to interact with the subject matter at their own pace. Assigning homework to students keeps them engaged and this enhances their academic achievement. The importance of homework is further emphasized by Leithwood et al, (2004) who observe that it enhances immediate learning achievement as well as long-term academic outcomes.

Teachers' responses indicate that monitoring instruction influences feedback given to students. However, compared to those that indicated that monitoring instruction influences class attendance and syllabi coverage the number of teachers that indicated that it influences feedback given to learners was lower. The lower percentage (63.9%) may imply that principals were not very keen in checking whether teachers gave feedback to students or not. It may also imply that the studied teachers did not consider provision of feedback to students important. Another argument may be that teachers gave feedback to learners irrespective of principals' monitoring instruction. Provision of feedback to learners helps them to be in control of their learning.

Feedback helps students to evaluate their progress. Provision of feedback may be marking assignments given to students or having one on one with individual learners to discuss their progress and where they have gone wrong. The importance of feedback is further elaborated by Albashir, Kabir and Rahman (2016) who observe that provision of feedback to students not only informs them of what is expected of them but it also triggers dialogues between them and the teachers on the feedback given. Conversation between teachers and students on feedback on their work enhances students' mastery of subject matter.

The high percentage of teachers (91.94%) indicating that monitoring instruction influences preparation and use of professional documents confirms that principals monitor instruction. Monitoring instruction involves checking professional documents (lesson plan, schemes of work, records of work covered and test) which help the teacher to plan for instruction, master the subject content and to select the most appropriate teaching-learning methods. The teacher is not only expected to prepare professional documents but also to implement them as they enhance their efficiency. Lesson plans for instance assist the teacher to utilize the lesson time optimally while record of work covered helps the teacher keep track of content covered. They may also help heads of departments to keep track of syllabi coverage in different subjects in their departments.

4.4.2.4 Monitoring Instruction by Checking Professional Documents

Teachers were asked to indicate how frequently lesson plans, schemes of work, records of work covered, tests and class registers are checked. Their responses are presented in Table 4.7.

Table 4. 7: Monitoring Instruction by Checking Professional Documents

Professional Document	Frequency				
	Daily	Weekly	Monthly	Termly	Never
Lesson plans	16 (22.2%)	41 (56.9%)	6 (8.3%)	2 (2.8%)	7 (9.7%)
Schemes of work	-	4 (5.6%)	4 (5.6%)	64 (88.8%)	-
Records of work covered	-	45 (62.5%)	10 (13.8%)	16 (22.2%)	1(1.4%)
Class registers	35 (48.6%)	31 (43.05%)	2 (2.7%)	4 (5.4%)	-
Tests	-		51 (70.8%)	21 (29.2%)	-

n=72

Table 4.7 shows that 16 (22.2%) teachers indicated that lesson plans are checked daily, 41 (56.9%) teachers indicated that lesson plans are checked weekly, 6 (8.3%) teachers indicated that they are checked monthly, 12 (16.6%) teachers indicated that they are checked termly while 7 (9.7%) teachers indicated that they are never checked. This indicates that for most of the teachers, 79.17% indicated that lesson plans are checked within a week. Majority of the teachers, 64 (88.8%) indicated that schemes of work are checked once a term, 4 (5.6%) indicated that they are checked monthly, the same number of teachers indicated that they are checked weekly. Three quarters of the teachers, 45 (62.5%), indicated that records of work covered are checked weekly. A small portion of the sampled teachers, 10 (9.7%) indicated that they are checked monthly, 16 (22.2%) indicated that they are checked termly and 1 (1.4%) teacher indicated that they are never checked.

Nearly half of the teachers, 35 (48.6%) indicated that registers were checked daily, 31 (43%) teachers indicated that they are checked weekly, 2 (2.8%) teachers indicated that they are

checked monthly while 4 (5.6%) teachers indicated that they are checked termly. This finding show that majority of the sampled teachers indicated that class registers are checked daily. Document analysis revealed that class registers were available in all the schools and were updated regularly by the class prefects. However, in five schools an average of five students had been marked absent for nearly half of the term. Interviews with the principals revealed that students' absenteeism was rampant where male students would absent themselves from school to take menial jobs in construction sites or work as motorcycle riders to earn money. Absenteeism was also prevalent among female students who were young mothers. While male students stayed away from school to work as motor cycle riders and to work in construction sites, female students stayed away to care for their young children or dropped out of school completely as a result of early pregnancies. One principal had to liaise with area chief to get students to return to school. Information provided by principals corroborates with students' responses to the statement '*Principal encourages us to attend school regularly*' where nearly all students in the sample (95.7%) agreed with the statement.

More than half of the teachers, 51 (70.8%) indicated that tests are checked monthly, while 21 (29.2%) teachers indicated that tests were checked once a term. Document analysis revealed that tests are administered in all the subjects offered in each school. In one school students took serial tests throughout the term. Checking tests and discussing the results with teachers may help the principal to evaluate instruction and quality of learning. Principal and teachers can use performance data from tests to make decisions on instruction.

Majority of the sampled teachers indicated that schemes of work are checked once in a term. Document analysis further confirmed that schemes of work were available and were endorsed by either the principal, heads of the departments or the deputy principals. Principals also confirmed that teachers are required to prepare the schemes of work at the beginning of every term. However, in two schools the schemes of work were printed and did not include the

remarks column. Therefore, the schemes of work did not indicate how the lessons were covered. Interview with one of the principals revealed that teachers in the school downloaded schemes of work from the internet without customizing them for their school and class. Preparation of schemes of work gives the teacher an opportunity to reflect on the subject content as well as the most appropriate teaching-learning methods to adopt. Mastering the subject content and adopting appropriate teaching-learning methods enhance teachers' classroom practice which in turn is expected to promote learning and academic performance.

The presence of updated registers shows that principals monitored school attendance closely. However, students 'chronic absenteeism was mentioned by the principals as daunting their efforts in enhancing teaching-learning environments. Regular school attendance enables learners to connect with subject matter and this enhances easy grasp of the content which should ultimately result in good academic attainment. Absenteeism may indicate that learners have no connection with their colleagues, teachers and school and do not learn optimally (Blum, 2005; Schaps, 2005). Absenteeism among the studied students may have been occasioned by other factors outside school which the school may not have control of. Absent learners miss out on content that may be required for adequate understanding of subsequent topics. As a result, they may experience difficult and lag behind in learning. Additionally, absenteeism affects instructional time and learning and finally academic achievement (Weber, 1987).

4.4.2.5 Checking Professional Documents as a shared Responsibility

The study solicited information on the person who checked the professional documents. Majority of the teachers, 69.4% indicated that it was the deputy principal who checked the professional documents, 16.67% of the teachers indicated that the principal checked while 23.61% teachers indicated that professional documents are checked by the heads of departments. The high percentage of teachers indicating that deputy principal checked

professional documents corroborates information collected from principals that they had delegated checking of professional documents to deputy principals. It further confirms the information provided by the principals that monitoring instruction is a shared responsibility among principals, deputy principals and heads of departments. A small portion of teachers indicating that principals checked professional documents confirms principals' assertion that they had delegated checking professional documents to deputy principals. Delegating monitoring instruction enables the principal to concentrate on other responsibilities while still maintaining accountability for instruction.

4.4.2.6 Monitoring Instruction through Lesson Observation

The study sought to establish from teachers whether principals monitored instruction by observing teachers in class. More than half of the sampled teachers, 70.8%, indicated that their principals conducted lesson observation while 29.2% indicated that they did not. Teachers who indicated that principals do not observe lessons were distributed in all the schools included in the sample. This does not necessarily indicate that lesson observation is not conducted in their schools. The responses suggest that lesson observation is a shared responsibility between the principals, deputy principals, heads of departments and other teachers. The Teachers Service Commission expects lesson observation to be hierarchical where teachers are observed by the Heads of Departments who in turn are observed by the Deputy Principal and the Deputy Principal is observed by the principal. The principal should be observed by the officers from the County Quality Assurance Office. However, this does not seem to be happening in all schools as there were only a few substantive heads of departments in the sampled schools. As such principals, being the chief instructional leaders in their schools, often find themselves conducting lesson observation and in some schools the deputy principals assist in carrying out the exercise.

Lesson observation presents the principal with opportunity to find out if the right content is being delivered to the students in the right way. It also provides opportunity for teachers' professional growth if it is properly organised. For lesson observation to impact teachers' professional growth and promote learning the teachers and the instructional leader should plan for lesson observation together with the aim of diagnosing teachers' pedagogical challenges and offering solutions. When conducted carefully, lesson observation not only enhances teachers' work performance, but also creates more learning opportunities for the learners.

4.4.2.7 Frequency of Lesson Observation

Teachers were asked to indicate the frequency of lesson observation. Teachers' responses are presented in Table 4.8.

Table 4. 8: Frequency of Lesson Observation

Lesson observation	Frequency	Percentage
No response	21	29.2
Monthly	21	29.2
Termly	22	30.6
Never	8	11.0
Total	72	100.0

Table 4.8 indicates that 29.2% of the teachers did not respond to the item. An equal portion of the teachers (29.2%) indicated that lesson observation was done once a month, 30.6% of the teachers indicated that they were observed termly, while 11.1% indicated that they are not observed. Out of the 51 teachers who responded to the item, majority of them indicated that they are observed once in a term. Interviews with principals confirmed the information that teachers were only observed once per term to meet TSC requirements. Additionally, when

asked how they monitor instruction only two out of the twelve principals indicated that they mainly used lesson observation to monitor instruction. This indicates that lesson observation was not conducted so frequently.

Occasional lesson observations would lead to skewed conclusions about the teachers' performance and ability. When carried out frequently lesson observation assists teachers to prepare and teach their lesson carefully. Instructional leaders can use lesson observation to promote teachers' professional growth especially those that are new in the profession. Lesson observation yields positive results when performed skilfully and consistently as it enhances teachers' professional development, enhance teachers' morale and stimulates instructional innovation (Weber, 1987). This is further supported by Bush and Glover (2008) who observe that lesson observation should be carried out continuously to ensure that teaching and learning taking place in school is adequate. The study observes that lesson observation was not carried out frequently and when it was it was not carried out well.

4.4.2.8 Provision of Feedback after Lesson Observation

Teachers were asked whether their principals gave them feedback after lesson observation. Out of 43 teachers who indicated that principals carried out lesson observation 30 (69.44%) indicated that they were given feedback. A small portion of teachers, 7 (16.67%), did not respond to the question while 6 (13.88%) indicated that they were not given feedback after lesson observation. Majority of teachers (69.44%) who responded to this item indicated that they were given feedback. Provision of feedback after lesson observations plays a critical role in teachers' professional development. The importance of providing feedback to the teacher after lesson observation is underscored by Chen (2018) who adds that provision of feedback helps provide solutions to teachers teaching problems.The Organisation of Economic Co-operation Development (2009) adds that provision of feedback enhanced job satisfaction for

teachers. The evaluator is expected to hold a post observation session with the teacher to discuss teacher's performance in the lesson and pin point areas that require improvement. Failure to provide feedback after lesson observation leaves the teacher guessing about their performance in the lesson. Lesson observation fails to meet its purpose if feedback is not given to the teacher.

4.4.2.9 Timing of the Feedback

The study also sought to establish the timing of the feedback. Out of 30 teachers who indicated that their principal gave feedback 13 accounting for 43.3% indicated that it was given immediately after lesson observation while 17 (56.7%) indicated that it was given after some time. Immediate provision of feedback enables the teacher to connect it with the lesson just observed, identify the errors and to develop and shape future teaching. As such the teacher can act on the areas pinpointed by the evaluator. Failure to provide feedback leaves the teacher speculating about their classroom practice. It also defeats the purpose of carrying out the observation. According to Leithwood (2000) instructional leaders who observe lessons and provide timely feedback on teaching and learning process influence learners achievement positively. Immediate provision of feedback after lesson observation helps the teacher reflect on the lesson just concluded and how to maximize learning opportunities for the learners. Delayed feedback may not be useful as the teacher may not relate it to the lesson of interest.

4.4.2.10: Usefulness of Feedback Given After Lesson Observation.

Teachers were asked to rate the usefulness of feedback given after observation. Eight out of 30 teachers who had indicated that they received feedback after lesson observation did not respond to this item. Majority of the teachers who received feedback, 13, accounting for 43.056% indicated that it was useful while 4 (13.33%) of the sampled teachers rated the feedback given as very useful. One teacher (4.7%) indicated that it was very un-useful, 2 (7%) teachers indicated that it was not useful and 2 (7%) teachers were undecided. This shows that majority

of the teachers who responded to this item indicated that feedback given after lesson observation was useful. One teacher who rated the feedback given by the principal as useful explained that it was aimed at identifying teachers' weaknesses and helping them to improve teaching. Another teacher explained that principal advised the teacher on the most appropriate teaching-learning methodology to adopt. However, one of the teachers in school J who indicated that feedback was not useful explained, "*Whenever feedback is given it is in form of a dress down".*

Provision of feedback to the teacher after lesson observation provides the observer an opportune time to discuss with the teacher how to address the gaps in their classroom practice in order to meet the set goal. As such it should be packaged in a way that helps the teacher to enhance their classroom practice. The argument above supports Stronge et al., (2008) who suggested that feedback provided to the teacher after lesson observation should be designed to help the teacher learn the specifics of teaching their subject of specialization. This requires the instructional leader to package the feedback in a way that assists the teacher to improve their classroom practice. If done correctly, feedback after lesson observation may enhance teachers' work performance, teachers' professional development and learners' achievement.

4.4.2.11 Lesson Observation as a Distributed Task

The study further sought to establish from teachers whether the task of lesson observation was a distributed task or not through the question *'Who else participates in lesson observation?'* Half of the teachers (50%) indicated that heads of departments observed lessons, 45.8 % indicated the deputy principal and 30.6% of the teachers indicated other teachers participated in lesson observation. Two principals confirmed that teachers were asked to observe colleagues in their areas of specialization especially where there was more than one teacher in an area of specialization. However, the principals in school L expressed reservations in delegating lesson observation as it may not be conducted at all. The principal indicated "*Some heads of*

departments liaise with teachers to lie about lesson observation and simply fill in lesson observation forms from the staffroom.'' The principal further observed: "Monitoring *instruction is seen as victimization. It causes rifts amongst teachers when the principal delegates lesson observation to other teachers"* Another principal in school H explained that: 'Teachers *are only receptive to positive feedback'*. The principal added that: *"Teachers fail to prepare for lesson observation and deliberately avoid the principal and deputy principal on the day they had been asked to prepare for observation"*

Heads of departments not supporting the principal in monitoring instruction is indicative of the challenges facing monitoring instruction especially through lesson observation. Although the principal is expected to be knowledgeable in curriculum delivery, Heads of Departments and other teachers may have specialised in the same area as the teacher being observed, as such they can enhance teachers' efficacy by observing teachers in class and analysing their performance skilfully in order to provide meaningful feedback. This may not be so with the principal or the deputy principal who may not have specialised in the same area as the teacher being observed.

Another challenge is that feedback given may be misconceived to be driven by malice. This finding converges with Lineburg (2010) that having teachers observe their colleagues was marred by malice and mistrust among teachers. It defeats the purpose of monitoring instruction when teachers are only receptive to positive feedback from evaluators after lesson observation. This finding is in line with the findings of Lee et al. (2012) who found out that direct supervision was perceived negatively by teachers and was considered as unnecessary pressure undermining teachers' professional development and autonomy. However, Wanzare (2012) opines that lesson observation is an effective method of obtaining information on teachers' pedagogical effectiveness and can be used to enhance the quality of teaching. From the above argument it can be observed that lesson observation can only bear fruitful results if the teacher is receptive

to the feedback given and is ready to work on areas suggested by the appraiser and if the teacher is enlightened on the essence of lesson observation in their professional growth.

Principals indicated that most of the teachers were observed only once per term to fulfil Teachers' service commission's requirements as they failed to prepare and avoided the principal or the deputy principal on the day they had been asked to prepare for lesson observation. This indicates that teachers had a negative attitude towards observation. Lesson observation may be carried out for accountability purposes or to enhance teachers' performance which in part creates more learning opportunities for the learner. The Teachers service commission requires that teachers are observed in class at least once per term as part of the performance appraisal exercise. However, a principal may carry out lesson observation as it may be necessary or facilitate heads of departments, who can attend to details of curriculum delivery in their areas of specialization and do so to promote teachers' professional growth.

In the Code of Regulations for Teachers, the Teachers Service Commission (2015) stipulates that the appraisal report shall be used for promotion, deployment and other rewards as well as in identifying training needs and taking corrective measures where teachers' performance is not satisfactory. This may influence teachers' attitude towards lesson observation as they may link it to punitive measures which may ensue after unfavourable appraisal. For lesson observation to be meaningful principal should tailor it to enhance teachers' instructional capacity. Further, Lee et al (2012) note that when teachers perceive lesson observation as being driven by the need to create more learning opportunities for the learner and to promote teachers' professional growth they are more likely to be receptive to lesson observation and feedback given after the exercise.

4.4.2.12 Principals Effectiveness in Monitoring Instruction

The study sought to establish teachers rating of principal's effectiveness in monitoring instruction using a five point likert scale where 1 denoted very ineffective, 2 denoted ineffective, 3 denoted don't know, 4 represented effective and 5 indicated very effective. Teachers' ratings of principals' effectiveness in monitoring instruction are shown in table 4.9.

Table 4. 9: Principals Effectiveness in Monitoring Instruction

Rating	Frequency	Percentage
Very ineffective	2	2.8
In effective	7	9.7
Dont know	20	27.8
Effective	28	38.9
Very effective	15	20.8
Total	72	100.0
	n=72	

Table 4.9 shows that 2 (2.8%) teachers rated principals as very in effective while 7 (9.7 %) indicated they were in effective. Twenty teachers accounting for 27.8% of the sampled teachers were un decided while 28 (38.9%) considered principals as effective and 15 (20.8%) teachers indicated that principals were very effective. This shows that slightly more than a half (59.7%) of the sampled teachers indicated that principals were effective in monitoring instruction.

It is worth noting that teachers who rated principals as ineffective had also indicated that lesson observation is carried out by heads of departments, other teachers and deputy principals. Teachers who indicated that they did not know whether the principal was effective or ineffective in monitoring instruction may be teachers who had had a short stay in the school at the time of

the study. They may also be teachers who had negative attitude towards monitoring instruction as deduced from interviews with the principals which may point to ineffectiveness in teaching or teachers who view appraisers' feedback that point to areas of weakness or those that require improvement as criticism and not as opportunities for growth. The responses may also be from teachers who had received negative feedback or those who do not prepare well for instruction.

Effective monitoring of instruction enhances teaching and learning which goes a long way in promoting academic performance. If conducted effectively monitoring instruction, especially lesson observation enhances teachers' professional growth and learning opportunities for learners**.** This is necessarily so when feedback that is tailored to help the teacher to improve their classroom practice is given to the teacher immediately after lesson observation (Stronge, 2008). To promote teachers' professional growth, monitoring instruction through lesson observation should be properly organised to assist the teacher identify and address gaps in classroom practice regarding teaching strategies, mastery of subject matter and classroom management (Chen,2018). Teachers' responses further show that more than half of the studied teachers (59%) rated their principals as effective. This shows that teachers considered monitoring instruction an important practice in their professional growth. It also suggests that although there were challenges it is possible to overcome them.

4.4.3 Influence of Promotion of Teachers Professional Development on School Academic Environment

The study sought to find out from teachers whether their principals promote professional development. Majority of the sampled teachers (52) indicated that their principals supported teachers' professional development while the remaining 20 indicated that they do not. Majority of teachers indicated that their principal promoted teachers' professional development while their colleagues in the same school refuted the same. This may be explained by the fact that

teachers were drawn from different departments and perhaps the training programmes the principal supported teachers to attend were not relevant to them.

4.4.3.1 Strategies Adopted by Principals to Promote Teachers' Professional Growth

The study solicited information on the efforts principals make to enhance teachers' professional development. Nearly three quarters of the teachers, 51 (70.8 %) indicated that their principals provided information on upcoming trainings while 21 (29.2%) teachers indicated that they do not. More than half of the teachers, (45) accounting for 62.5% of the sampled teachers indicated that principals give monetary facilitation, while 27 (37.5%) teachers indicated that principals did not. Majority of the teachers, 48 (66.7%) indicated that the principals allow teachers time out to attend training, while 24 (33.3%) teachers indicated that they do not.

Majority of the sampled teachers indicated that principals facilitated them to attend trainings. This concurs with information provided by principals during interviews where the principal of school D mentioned having sponsored teachers of English to attend training by Kenya National Examination Council (KNEC). Teachers also indicated that they had been facilitated to attend training on curriculum delivery while others had been sponsored to attend science congresses and workshops on set books in Kiswahili and English. The majority of teachers in the sample indicated that the principals allowed teachers time out to attend professional training. These findings agree with information collected through interviews with principals who affirmed that they had supported teachers to attend professional development programmes.

Supporting teachers to attend training indicates that the principal is interested in their professional growth thus promoting extrinsic motivation to improve on their work performance. These findings echo Nettles and Herrington (2007) findings who indicate that successful principals promote professional growth of teaching staff by paying for professional development training and conducting professional development on best instructional practices

for teacher. Allowing teachers time out to attend trainings gives them opportunity to enhance their skills and capacity. Additionally, it gives them an opportunity to interact with other teachers and to sharpen their teaching practices. However, just allowing time out may not be enough to promote teachers' professional growth. The principal needs to follow up on teachers to ensure that whatever is learnt in such programmes is implemented to enhance their classroom practices and learning.

The study sought to establish from principals how they promoted teachers' professional growth. All the twelve principals in the sample indicated that they promoted teachers' professional development by allowing them to attend seminars and workshops, providing information on upcoming trainings and offering financial facilitation. Three principals had also organised in-house trainings on integration of ICT in education. Among the twelve principals interviewed none of them indicated that they had supported teachers to implement skills learnt from the training programmes attended outside school.

Trainings on general aspects of teaching, especially of the kind teachers in the sample attended, may not necessarily address individual teachers' professional development needs. This is unlike mentoring, modelling, observation and provision of feedback which may address the specific needs of the teachers and provide them with opportunity to learn and adopt new strategies which can be implemented with the help of the principal and other experienced teachers in the school. It is important to note that techniques learnt in these trainings may have little or no influence on their teaching (Zarrow, 2019) if the principal does not supervise the implementation of the learnt skills or support teachers to do so. The above observation resonates with Burns and Lawrie (2016) that when teachers receive guidance, support or feedback from a supervisor they tend to implement new strategies and adopt more diverse teaching strategies to improve learning.

Principals were asked to indicate any area of professional development they had worked on with teachers. Principals play a critical role in teachers' professional development by providing support as teacher learn new skills or implement what they have learnt, however, none of the principals in the study had worked with their teachers to enhance competency in their teaching subjects, implement or enhance what had been learnt in the seminars and workshops attended. Working with teachers to promote competence in their teaching subjects can positively impact their teaching and eventually learners' performance. Teachers require supervisory, peer, material and instructional support to implement what is learnt in professional development programmes (Burns & Lewrie, 2016). As such teachers should be assisted to implement what is learnt for the benefit of training programmes to be realised.

4.4.3.2 Teachers' Participation in Professional Development

The study sought to establish whether teachers had participated in any professional development programme two years from the time the study was conducted. Majority of teachers, 51 (70.83%) indicated that they had while the remaining 21 (29.17%) indicated that they had not participated in any professional development programme. It is important to note that teachers in the same school indicated that they had participated in professional development programmes while their colleagues indicated that they had not. This may be due to the fact that teachers were drawn from different areas of specialization and thus the professional development programmes were not relevant for them especially if training programmes specifically targeted certain areas of specialization for instance Science, Technology Engineering and Mathematics (STEM) or training on English or Kiswahili literature set books. Another thought is that these teachers were not interested in the training programme especially if the trainings were on general issues in education or teaching. Given that nearly a half of the teachers (47.5%) had taught for more than five years, they may have refrained from attending training programmes that they had attended earlier in their career lives as teachers. Teachers'

professional development is essential as it keeps teachers abreast with developments and innovations related to their work.

4.4.3.3 Organiser of Professional Development Programme

The study further sought to establish who had organised the professional development programmes attended by the teachers in this study. Their responses are presented in Table 4.10.

Table 4. 10: Organiser of Professional Development Programme

Organiser	Frequency	Percentage
No response	37	51.4
Principal	19	26.4
Ministry of Education	16	22.2
Total	72	100.0

More than half of the sampled teachers, 51.4%, did not respond to the question, 19 (26.4%) teachers indicated that their principals had organised the training while 16 (22.2%) teachers indicated that it was organised by the Ministry of Education. This shows that majority of the teachers (26.4%) who responded to the item indicated that principals organised the training. This corresponds with information given by 3 (25%) principals who indicated that they had organised in-house trainings for teachers on use of Information Communication Technology (ICT). Five principals confirmed having facilitated teachers to attend training organised by the Ministry of Education. Of the five principals, two indicated that they had sponsored teachers to attend training for examiners by Kenya National Examination Council, while another two indicated that senior teachers had been sponsored to attend training offered by Kenya Education Management Institute (KEMI).

Principals may promote teachers' professional development by conducting in-house training, working with teachers who are learning certain skills or facilitating teachers to attend such trainings outside school settings. Promotion of teachers' professional development motivates them and indicates that the principal is interested in their professional growth. Additionally, when a school organises professional development it communicates to teachers that they are expected to perform at a higher level (Mizel, 2010)

4.4.3.4 Influence of Promoting Teachers Professional Development on Teaching

The study sought to establish how professional development influenced teaching. Slightly more than half of the sampled teachers, 39 (54.2%) indicated that promotion of teachers' professional development enhanced their pedagogical skills. However, 10 (13.9%) of the teachers indicated that it does not, while 23 (31.9%) teachers did not respond to the item. A small portion of teachers, 13 (18.1%), indicated that participating in professional development programmes enhanced their mastery of content while 39 (54.2%) teachers indicated that it does not and 20 (27.8%) teachers did not respond to this item. Half of the sampled teachers (36) indicated that professional development enhanced classroom management, 13 (18.1%) teachers indicated that it does not while 23 (31.9%) did not respond to this item. Slightly more than a half of the teachers in the study, 42 (58.3%) indicated that attending professional development programme changed their attitudes towards work. However, 10 (13.9%) teachers indicated that it does not while 20 (27.8%) did not respond to this item.

Professional development can only influence teachers' pedagogical skills if it is preceded by lesson observations which provide opportunity for the instructional leader to diagnose the skills and the capacity that the teacher lacks. This is only possible if the principals design tailor made professional development programmes for teachers in their schools. Use of appropriate pedagogy helps the teacher to take students through the subject content and to take care of students' academic needs. Teachers' responses that professional development enhances

pedagogical skills is in line with findings made by Jawa (2014) who observed that professional development enhances teachers' pedagogical maturity. Pedagogical maturity enhances teacher's classroom practice and learners' opportunities to learn as the teacher adopts teaching strategies that enable learners to grasp the subject matter with ease.

Although the training attended were on the newly introduced Kiswahili and English set books slightly more than a half of the sampled teachers (54.2%) indicated that attending professional development programmes did not enhance teacher's mastery of content. This points out to the need to tailor such programmes to address teacher's professional training needs. Mastery of subject matter assists teachers to break down content into small units and to package them in ways that promote learning. When a teacher masters the subject content they develop the capacity to assist their students to grasp the content and to understand the subject content well. Enhanced mastery of subject matter promotes teachers' effectiveness thus creating more learning opportunities for the learners (Masuku, 2011). This would go a long way in enhancing their academic performance not only in the internal assessment but also in K.C.S.E. This supports sentiments by Chen (2018) who adds that when teachers master the subject content it enhances learners' comprehension of the content as well.

Effective classroom management optimises the utilization of teaching-learning time by controlling disruptive behaviour and sustaining students' attention. Classroom management facilitates the creation of an environment for effective teaching and learning to take place. Effective classroom management requires the teacher to adopt teaching methods that fully engage the learner to prevent them from engaging in disruptive behaviour. More than half of the sampled teachers (58.3%) indicated that attending professional development programmes helped them change their attitude towards work. Adopting a favourable attitude towards work enhances teachers' work performance and enables them to connect with their students. When teachers connect with their work and with their learners they enhance their classroom practice

which promotes learning and academic attainment for the learner. According to Alig-Mielcarek (2003) principals who promoted teachers' professional development influenced students' academic achievement and the school performance generally. By supporting teachers' professional growth, principals indicate that they are interested in teachers' wellbeing. This may influence their attitude towards work and eventually enhance learners' academic performance. Facilitating teachers' professional growth may motivate teachers to review their teaching with the view to enhance students' learning.

Further, the study sought to establish whether principals' efforts to promote teachers' professional growth influenced teachers' perceptions of the school academic environments. Out of the 72 teachers studied 44 (61.1%) teachers responded in the affirmative while 28 (38.9%) teachers indicated that principals' efforts to promote their professional growth do not influence their perceptions of school academic environments. The majority of the sampled teachers indicated that principals' efforts to enhance their professional growth influenced their perceptions of the school academic environment. One of the teachers indicated that principals' efforts to promote teachers' professional development influenced their perceptions of the school as it enhanced teachers' sense of belonging, value and made them to be more committed to their work.

Teachers' responses that principals' efforts to promote their professional development enhance teachers' perceptions of the school environment resonates with Lee, et al. (2012) that when teachers perceive the principal to be interested in their professional growth, they tend to be motivated and to adopt new teaching methodologies. This is important as when teachers foster positive attitudes towards their work place, they tend to be more productive. This suggests that they would connect with other teachers and leaners better. This may promote their classroom practices which in turn may enhance learners' confidence in the teacher and learners' academic attainment.

4.4.4 Influence of Promotion of Collaboration on School Academic Environment

The study sought to establish whether principals in the sampled schools promoted collaboration among teachers. More than half of the teachers in the study, 69.4%, indicated that their principals supported teachers' collaboration while the remaining 30.6% indicated that their principals did not. Supporting teachers to work together creates a culture of learning where teachers share ideas and learn from each other. Principals support teachers' collaboration by creating physical spaces such as staffrooms, departmental offices where teachers can work together. Additionally, they can support teachers to work together by creating structures and routines that support collaboration. According to Gumus et al. (2013) promoting teachers' collaboration creates moral support. Promotion of teachers' collaboration cultivates a collective focus on instruction which translate to more learning opportunities for the learner.

4.4.4.1 Teachers' Collaboration

The study further sought to find out whether teachers in the sampled schools worked together on activities related to teaching. Majority of teachers (50) indicated that they worked together with other teachers while the remaining 22 indicated that they do not. The 22 teachers who indicated that they do not work with other teachers were drawn from different schools. It is worth noting that their colleagues indicated that they worked together with other teachers. This may be explained by the fact that teachers in the sample were drawn from different areas of specialization where in some schools there were instances where there was only one teacher in an area of specialization. Another possible explanation is that they may be alienated teachers who do not cooperate with their colleagues.

More than a half of the sampled teachers indicated that they worked together with other teachers. When teachers collaborate they tend to learn from each other. Collaboration among teachers, nurtures professional development as teachers carry out their day to day work (Paulos

et al., 2014). In the long run it enhances their work performance which impacts positively on learning and students' academic attainment.

4.4.4.2 Collaborative Activities

Teachers were asked to indicate the activities in which they worked together. Their responses are presented in Table 4.11.

Table 4. 11: Collaborative Activities

Instructional Activities	Yes		No		Non response	
	F	%	F	%	F	%
Planning for instruction	48	66.7	12	16.7	12	16.7
Teaching	49	68.1	8	11.1	15	20.8
Preparation of teaching Materials	48	66.7	12	16.7	12	16.7
Preparation of tests and Examinations	50	69.4	14	19.4	8	11.1
Marking Tests and Examinations	47	65.3	9	12.5	16	22.2

n=72

Table 4.11 shows that majority of the teachers, 48 (66.7%) indicated that they worked with other teachers in planning for instruction. An equal portion of sampled teachers indicated that they work together with other teachers in preparing teaching materials while 49 (68.1%) teachers indicated that they collaborated in teaching. This was confirmed by 7 principals who indicated that they promoted team teaching amongst teachers where co-teaching was exercised based on preference of topics. One of the seven principals confirmed having participated in joint teaching in his area of specialization. Another principal added that students were allowed to consult any teacher teaching the same subject. More than half of the teachers, 50 (69.4%) reported that they worked with other teachers in preparing tests and examinations, while 47 (65.3%) teachers indicated that they worked together in marking tests and examinations. This

was confirmed during interviews with principals who indicated that teachers worked together in marking tests and examinations.

Teachers' responses indicate that majority of teachers in the sample worked together in executing different teaching practices and tasks under discussion. Teachers who indicated that they do not collaborate with other teachers may be indifferent or hostile teachers who do not cooperate with other teachers as a result of differences in principles or personal issues. It may also indicate that they are the only teachers in their school in their area of specialization like in school D where there was only one teacher each in geography, history and Kiswahili. In school K there was only one teacher of business. Planning for instruction enables the teacher to internalize subject content and to select the most appropriate teaching-learning strategies for the learners. When teachers plan for instruction with the learner in mind they tailor their teaching to address learners' needs. Additionally, planning helps the teacher to utilize the lesson time optimally and choose activities that would capture and sustain learners' attention throughout the lesson. Joint planning for instruction may also serve as an opportunity for less experienced teachers to learn from more experienced teachers. Planning for instruction together may ensure some degree of uniformity in curriculum delivery. Moreover, working together with other teachers cultivates a feeling of togetherness and belonging and also builds strong teams that focus on students learning.

Co-teaching gives teachers opportunity to teach areas of a subject that they have mastered well. When teachers handle topics that they have mastered it enhances learning for the students. Co-teaching, however, requires a high level of planning so as to ensure that some areas are not neglected. When the principal is involved in co-teaching as indicated by one principal in the study it helps create effective structures that promote collaboration (Miller et al, 2010). Additionally, it motivates teachers to be more committed to their work as the principal models the behaviour expected from the teachers. When students' learning becomes a shared

responsibility among teachers, academic performance may be enhanced as learners benefit from extensive expertise.

Preparing teaching materials together may provide opportunity for teachers to engage each other on how to tailor their teaching to address specific needs of the learners in their school. Preparing teaching materials together may further ensure some degree of uniformity in teaching especially in schools with more than one stream. This supports Miller et al. (2010) who found out that when teachers plan together with focus on instruction, learners' achievement is enhanced as teachers share ideas on teaching strategies thus creating more learning opportunities for the learner. Joint preparation of tests and examination may enlighten teachers on questioning skills as well as areas of emphasis in their teaching subjects. While preparing tests together may prompt teachers who are lagging behind in syllabi coverage to ensure that they are at par with other teachers, marking tests together provides an opportunity for teachers to enhance their competence in their teaching subjects and also ensure objectivity in awarding marks.

When teachers work together they cultivate trust amongst themselves which positively strengthens their bond as teams. Working in supportive teams strengthens teachers work performance which impacts students' learning positively. Teachers may view their work place as their second home which may influence their decision to stay in a school. The longevity of teacher's in a school enhances their work performance and provides stability for learners.

4.4.4.3 Influence of Collaboration on Aspects of Teaching

Teachers were asked to indicate whether working with other teachers influenced mastery of content, pedagogical skills, creativity in use and development of teaching resources and how to address learners' challenges. Out of the 72 teachers, 49 (68.1%) indicated that working with other teachers enhanced mastery of content in their teaching subjects while 13 (18.1%) teachers

refuted the same while 10 (13.9%) teachers did not respond to this item. An equal number of teachers, 49 (68.1%) indicated that working with other teachers enhanced their pedagogical skills while 12 (16.67%) teachers indicated that it does not and 10 (13.9%) did not respond to this item.

On whether promotion of collaboration enhances teachers' creativity in use and development of teaching resources, 50 (69.4%) teachers indicated it did, 8 (11.1%) indicated that collaboration does not enhance their creativity in use and development of teaching materials while 14 (19.4%) teachers did not respond to this item. Majority of sampled teachers, 59 (81.9%) indicated that collaboration enlightened them on how to address learners' challenges while the remaining 13 (18.1%) teachers indicated that collaboration does not enlighten them on how to handle learners' challenges.

From the responses of majority of teachers, it is apparent that working with other teachers influenced different aspects of teaching in varying proportions. Working with other teachers provides opportunity for less experienced teachers to learn from the more experienced teachers. When teachers work together in planning for instruction, preparing teaching materials, teaching, preparing and marking tests and examination they may learn from each other on the most appropriate teaching and examining strategies to adopt.

Mastering subject content is important as it influences teaching that takes place in class and what is passed on to the learner. This finding echoes that of Poulos, et al. (2013) who found out that collaboration provided feedback to the teacher on their practice and helped them sharpen their pedagogical skills by providing an opportunity to learn from each other. In line with this argument, Gumus et al (2013) add that teachers' collaboration leads to enhanced instruction and consequently higher learners' academic attainment. More experienced teachers may have insight on how to approach certain content in order to enhance learning. Teachers who

collaborate with other teachers in planning for instruction and teaching may model to other teachers how to creatively use and or develop teaching materials. Working with colleagues may prompt teachers to go out of their way to use their creativity to enhance teaching.

Collaboration not only presents teachers with opportunity to improve their teaching strategies, mastery of content and creativity, but also enables the development of strategies on how to address students' needs. Collaboration enables teachers to share challenges encountered by their learners and to devise strategies to address them. Students in secondary schools may encounter academic and non-academic challenges which may be handled adequately if teachers work together. Teachers' responses that collaboration enlightened them on how to address challenges faced by learners is in line with Poulos, et al (2013) who found out that teachers formed teams that discussed pedagogical methods to address skills and content students were struggling with. Designing teaching to address learners' challenges increases learning opportunities for the learner and subsequently their performance. The findings that collaboration influences different aspects of teaching converges with findings by Usainiet al. (2015) Usaini et al., (2015) that collaboration between teachers enhances learning both for the teachers as they learn from each other and the learners.

Teachers who indicated that working with other teachers does not influence aspects of teaching may be alienated or may be contemptuous of the expertise of their colleagues. They may also have low or unrealistic perceptions of their abilities as teachers. Such teachers tend to work alone. Further, teachers were asked whether principal's efforts to promote collaboration amongst teachers influence how they perceive their school. About three quarters of the sampled teachers, 57 (79.2%) responded in the affirmative while 15 (20.8%) indicated that principals' efforts to enhance collaboration among teachers do not influence their perceptions about their school. One teacher who indicated that principals' efforts to promote collaboration among teachers influenced their perceptions of the school academic environment explained that

collaboration harnessed their efforts and helped them work towards a common goal. Another teacher added that collaboration enhances school environment and makes it conducive for teaching and learning as it makes teachers' work easier.

Principal's support is required in enhancing collaboration amongst teachers. Collaboration influences teaching as it not only enhances teachers' perceptions of school environment but also helps teachers to learn from each other, enhance their pedagogical skills and mastery of content. Instructional leaders are expected to create environments that make collaborative practices amongst teachers possible. Principals can enhance collaboration amongst teachers by organizing the physical space and time to enable teachers to work together. Building collaborative environments not only promotes teachers' professional growth but also create an opportunity for teachers to share knowledge and skills (Burns & Lewrie (2016) thus creating more learning opportunities for the learner. Teachers who indicated that promotion of collaboration does not influence how they perceive the school environment may be detached from the school and may not value the expertise of other teachers.

4.4.5 Influence of Utilization of Available Resources on School Academic Environment

The study sought to determine availability and adequacy of resources from teachers and learners. Teachers' responses are presented in Table 4.12.

Table 4. 12: Adequacy of Resources

Resources	Adequate	In adequate	Non response
Staffroom	57 (79.2%)	12 (16.7%)	3 (4.17)
Toilets	45 (62.5%)	26 (36.1%)	1 (1.39%)
Library	27 (37.5%)	44 (61.1%)	1 (1.39%)
Classes	49 (68.1%)	19 (26.4%)	4 (5.56%)
Laboratory	43 (59.7%)	28 (38.9%)	1 (1.39%)
Teachers Guide	52 (72.2%)	19 (2.64%)	1 (1.39%)
Text books	57 (79.2%)	14 (19.4%)	1 (1.39%)
Departmental Offices	21 (29.2%)	50 (69.4%)	1 (1.39%)
Chalk	62 (86.1%)	9 (12.5%)	1 (1.39%)

n=72

Table 4.12 indicates that 57 (79.2%) teachers indicated that staffrooms were adequate, 12 (16.7%) indicated that they were in adequate while 3 (4.17%) teachers did not respond to this item. The same information was also collected using observation where the researcher observed that in school A there was no staffroom. Teachers used a small room next to the kitchen. The administration was also housed in a primary school that hosted the school. In school D the principal and the deputy principal used a makeshift structure as the office with dilapidated furniture. Observation revealed that teachers in these two schools had to do with dilapidated furniture.

Majority of the sampled teachers, 45 (62.5%) indicated that toilets were adequate, 26 (36.1%) teachers indicated that they were not while 1 (1.39%) teacher did not respond to the item. On the same aspect 93 (28.9 %) of the sampled students indicated that toilets were adequate while 229 (71.1%) of the learners indicated that they were not. Observation revealed that there was need to improve on the cleanliness in the toilets, enhance watering points and the number of

toilets in three schools. Majority of teachers 44 (61.1%) indicated that libraries were inadequate, 27 (37.5%) indicated that libraries were adequate while 1(1.39%) teacher did not respond to this item. The same was echoed by majority of the students where 180 (55.9%) indicated that school libraries should be enhanced. Indeed, data collected through observation revealed that 50% of the sampled schools did not have libraries.

On the adequacy of classrooms, 49 (68.1%) teachers indicated that classrooms were adequate, 19 (26.4%) teachers indicated that they were not adequate while 4 (5.56%) teachers did not respond to the item. Majority of the students, 214 (66.4%) indicated that classrooms were inadequate while 108 (33.6%) students indicated that classrooms were adequate. Observation revealed that most of the classes were adequate, with lockable lockers that were properly arranged allowing adequate passage ways between rows except in one school where classes were congested with more than sixty students in each class. Researcher's observation and teachers' responses that classes were adequate converged.

More than half of the teachers, 43 (59.7%) indicated that laboratories were adequate, 28 (38.9%) teachers indicated that they were inadequate while 1 (1.39%) teacher did not respond to this item. Majority of students 262 (81.4%) indicated that laboratories were adequate while 60 (18.6%) indicated that they were not. Indeed, observation confirmed that school D was using a makeshift structure as a laboratory. However, there were adequate laboratory apparatus. This indicates that majority of sampled schools had laboratories but the buildings that housed the laboratories were in appropriate.

On the adequacy of teachers' guides 52 (72.2%) teachers indicated that they were adequate, 19 (26.4%) indicated that they were inadequate while 1 (1.39%) did not respond to this item. Majority of teachers 57 (79.2%) indicated that textbooks are adequate, while 14 (19.4%) teachers indicated that they were in adequate and 1 (1.39%) teachers did not respond to this

item. Most of the students 234 (72.7%) indicated that text books were inadequate while 88 (27.3%) students indicated that books were adequate. Observation confirmed teachers' responses that books were adequate.

On book: student ratio in their teaching subjects 56 (77.8%) teachers indicated that it was 1:1, while 10 (13.9%) teachers indicated that it was 1:2, 1 (1.4%) teacher indicated that it was 1:3 while 5 (6.9%) teachers indicated that it was 1:4. In 6 (50%) schools in the sample the books were locked up in a cupboard in the principals' office as there was no storage area available, in one school books were still lying in the cartoons in which they had been supplied. Majority of the teachers indicated that book: students' ratio was 1:1. Although books were rated as adequate interviews with principals revealed that most of the text books had many errors and were not easy to use.

Additionally, there was shortage of text books in certain subjects while in some there were more text books than the number of students. The principal in school A reported: *'The number of books supplied is not the one requested for. It seems that the government uses out-dated data for issuance of text books*.' More than half of the teachers, 50 (69.4%) indicated that departmental offices were inadequate, 21 (29.2%) teachers indicated that departmental offices were adequate while 1 teacher (1.4%) did not respond to this item. The researcher also noted by observation that 8 (66.7%) schools did not have departmental offices. Nearly all teachers in the sample 62 (86.1%) indicated that chalks were adequate. However, 9 (12.5%) of the teachers indicated that chalks were inadequate while 1(1.39%) teacher did not respond to the item. Interviews with the principals confirmed that inadequacy of consumable materials was occasioned by late disbursement of funds by the Ministry of Education.

The study further sought to establish whether the schools had perimeter fences and security personnel at the gate. On the perimeter fence, 4 (30%) schools did not have a fence. School D

did not have a gate. Data collected through observation revealed that 7 (58.3%) schools did not have security guards at the time of observation. In 5 (41.7%) schools security personnel were at the gate and check-in check-out systems were functional. Students were asked to rate the adequacy of games facilities. Two thirds of the learners, 66.5%, indicated that games facilities were inadequate while 33.5% indicated that they were adequate. More than half of the students, 192 (59.6%) indicated that clubs were adequate while 130 (40.4%) students indicated that they are not.

On the adequacy of lunch 148 (46%) learners indicated that lunch was adequate while 174 (54%) reported that it was inadequate. Interviews with principals revealed that the sustainability of lunch programme in schools is hindered by late payment of lunch fees by parents. Half of the learners indicated that teachers are adequate while an equal number indicated that they are inadequate. The same sentiments were shared by principals who indicated that teachers were inadequate with certain subjects lacking TSC teachers completely. In one school the principal indicated that they had a deficit of as many as twenty teachers. Further the principals indicated that they relied on teachers employed by Board of Management whose turnover rate was very high.

A small portion of the sampled learners, 65 (14.6%) indicated that teachers' class attendance was adequate while, 275 (85.4%) indicated that teachers' class attendance was inadequate. On the adequacy of homework given to students 65 (20.2%) of the students indicated that homework was adequate while the majority of the students, 257 (79.8%), indicated that there was need for improvement. One of the principals indicated that students failed to attempt homework given to them. Document analysis revealed that homework is given in mathematics, English and Kiswahili while in other subjects it is not given regularly.

Teachers who indicated that staffrooms were inadequate were from school A and D which were relatively new as indicated by the principals during interviews. This may explain the inadequacy of physical resources as the schools were struggling to put the required facilities in place. Provision of a spacious staffroom with adequate furniture ensures that teachers have a physical space where they can plan for instruction, interact and work with other teachers. Having an adequate staffroom enhances staff wellbeing; build a sense of community and connectedness among teachers (Vukovic, 2017). While staffrooms provide teachers with the physical space where they can discuss issues related to the school and staff welfare adequate laboratories enhance learning by assisting students to put into practice theoretical concepts learnt in class thus promoting academic achievement. This observation agrees with Olubu (2015) that laboratories create positive and constructive environment that improves students learning achievement.

The book to student ratio of 1:1 as indicated by the majority of teachers implies that students would attempt homework assigned to them with ease as they had access to text books. Adequate interaction with text books can enhance learning and eventually academic performance if they are utilised fully. The findings of this study agree with Mugure (2012) who observes that access to text books enables learners to attempt home and class work which enriches their learning. Majority of teachers (72.2%) indicated that teachers' guides were adequate. The fact that teachers in the same school gave different answers on adequacy of teachers' guides shows that they were drawn from different areas of specialization where some subjects had adequate teachers' guides while others did not. Teachers' guides enhance uniformity in content delivered to learners.

Lunch programmes in day schools supports school academic achievement by reducing absenteeism and minimising disruptions to the teaching-learning time. Principals indicated that even though they had initiated a lunch programme they found it difficult to maintain it as many

parents failed to pay for the lunch programme in spite of the fee being too low ranging between 1,500 to 2,500 shillings per term. Lunch programmes enhance teaching and learning by reducing interruption between school hours. Lunch programmes in day secondary schools reduce time wastage, improves students' alertness and enhance academic performance (Bell 2013).

A perimeter fence controls entry into the school while security personnel keep an account of the people visiting the school. A perimeter fence blocks out distractors from making their way into the school. A perimeter fence enhances the teaching-learning environment for teachers and learners respectively by protecting them from unauthorised people. It also enables the security personnel to keep track of those entering and leaving the school.

Majority of the students in the study (66.5%) indicated that games are in adequate. However, 33.5% of students indicated that they were adequate. Students who indicated that games were in adequate came from different schools where their colleagues indicated that they were adequate. This may be attributed to the fact that students may have different preferences for games. Participation in games helps students to identify with a group and the school they attend. According to Wilson (2009) participation in games helps students connect with the school and this enhances learners' school attendance and in return enhances academic performance. Perhaps the chronic absenteeism reported by the principals may be as a result of students not connecting to their school.

Majority of students (56.4%) indicated that clubs are adequate. However, a considerable portion (40.4%) refuted the same. This points out at the gap that exists in school activities that could help students to connect with their school. This may explain chronic absenteeism as cited by the principals in the sample as one of the factors impeding their efforts to enhance school academic environment and academic achievement. Enhancing games and clubs may promote

school attendance for students with interest in such activities. To enhance students' perceptions of the school environment, it is imperative to engage them in activities and experiences that promote academic growth as well as other aspects of life (Groves and Welsh, 2010). Additionally, participation in club activities reduces absenteeism significantly. This in part enhances the favourableness of the school environment and learners' academic achievement (Wilson, 2009).

4.4.5.1 Strategies adopted by Principal's to Enhance Utilization of Available Resources

On the question on how principals enhance the utilization of available resources principals restricted themselves to text books and teaching-learning time. Majority of principals (9) indicated that books are issued at the beginning of the term and picked at the end of the term. Students are also allowed to borrow books during school holidays which accords learners adequate access to text books. This ensured that students had access to books for work given by the teachers as well as their own reading. Interaction with learning materials enables students to master subject content and to attempt assignments with ease. Adequate access and utilization of text books enhances learning. However, students were reported to be reluctant to pick the books even when school is in session for fear of losing them.

On the utilization of teaching-learning time all the 12 (100%) principals in the study indicated that lunch is served in school for both teachers and learners. This ensures that no time is wasted by either teachers or learners moving outside the school to get lunch. Additionally, provision of lunch in school not only enhances instruction time but also reduce interruptions by sealing off opportunities for students who may misbehave or stay away from school in the afternoon if they go outside to look for lunch. The principal of school K added that to ensure that no time is wasted in transition between lessons, a strategy referred to as 'operation 40' had been enforced which saw teachers wait from outside classroom for their lessons and not from the staffroom.

Additionally, teachers are also required to prepare for teaching beforehand by preparing schemes of work. Requiring teachers to plan for instruction reduces drain on instruction time as teachers can plan to spend adequate time on a task to enhance learning. One principal indicated that he ensured that students are in class and that the school time table is followed. Teachers are also required to sign staff attendance register. Optimum utilization of teaching-learning time enables the teacher to cover the syllabi in time promoting learning and performance. Another principal indicated that teacher and prefect on duty ensured timely resumption of classes after break and lunch time. Ensuring that teachers prepare for teaching before the beginning of the term and strict adherence to the time table ensures optimal utilization of teaching-learning time.

The study also sought to establish whether principals encouraged teachers to utilize their creativity in utilization of resources. Majority of the teachers, 45 (62.5%), responded in the affirmative while 27 (37.5%) teachers indicated that they do not. The results indicate that majority of the teachers in the sample affirmed that principals influenced teachers to use their creativity in utilization of available resources. One teacher who indicated that the principal encouraged creativity in utilization of resources explained that: '*Our principal encourages us to use locally available materials to develop teaching-learning resources where possible'*

In Kenya the government supplies most of the resources required in schools (MOE, 2015). However, the differentiation between schools is brought about by the utilization of available resources. Principals' influence on utilization of available resources is further underscored by students' responses on the statements '*principal encourages us to utilize available resources well'*. Nearly all students in the sample, 302, accounting for 93.8% agreed to the statement. This suggests that nearly all principals promoted optimal utilisation of the available resources to maximize the realisation of desired academic outcomes. According to Okeke and Okoye (2013) optimal utilization of available resources enhances teaching and learning process and ultimately

academic attainment. The call for the students to use the available resources well plants in their mind the importance of being responsible. This is further echoed by Weber (1987) who observes that encouraging students to take care of school facilities makes them active participant in enhancing the school environment by helping them realize that taking care of the available resources is partly their responsibility.

4.4.5.2 Influence of Availability and utilization of Resources on Teaching

The study sought to establish whether availability of resources and principal's influence on their utilization influenced teaching. Nearly all the teachers, 68 accounting for 94.4% of sampled teachers indicated that availability of resources influenced their teaching while 4 (5.6%) teachers indicated that availability of resources does not influence teaching.

Teachers were further asked to indicate how availability and use of resources influenced teaching. Their responses are presented in Figure 4.4.

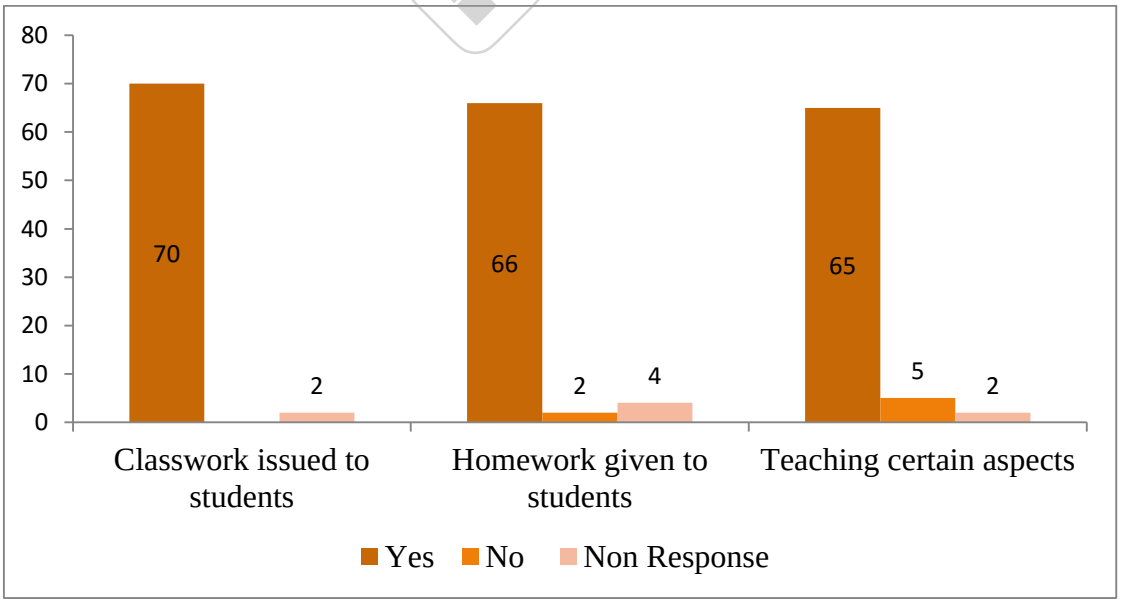

Figure 4. 4: Aspects of teaching influenced by availability and use of resources

Figure 4.4 indicates that almost all the teachers (70) indicated that availability and use of resources influences classwork given to students while 2 teachers did not respond to this item.

Nearly all the teachers (66) indicated that availability and use of resources influenced homework given to learners. However, 2 teachers indicated that availability of resources does not influence homework given to students while 4 teachers did not respond to this item. Nearly all the teachers (65) indicated that availability and use of resources influences teaching of certain aspects of their teaching subject while 5 teachers indicated that it does not and 2 teachers did not respond to this item.

Resources such as textbooks may determine the amount of work given to students. Inadequacy of resources may limit the amount of classwork given to students. If books are not availed to students attempting school work may be difficult. When students attempt classwork it reinforces teacher's work and enhance learners' academic attainment. By ensuring that students are issued with text books at the beginning of the term as attested by majority of principals teachers are able to issue home work to students. This may be particularly important for students in day schools who may have to attempt homework assignments from home. Homework given to students makes them responsible for their learning and may also deepen their understanding of what is taught in class.

Majority of teachers in the sample indicated that availability and use of resources influenced teaching of certain aspects of their subjects. Different materials are required for effective teaching of varied subjects areas offered in secondary schools. For effective teaching appropriate teaching-learning resources should be availed to teachers and learners. This resonates with findings by Masuku (2011) who found out that lack of water in school hindered teaching of agriculture.

4.5 School Academic Environment

Teachers were asked to rate the school academic environments in which they work. Their ratings were measured on a five-point scale using 11 statements where 1 denoted strongly

disagreed, 2 denoted disagree, 3 indicated neither agree nor disagree, 4 denoted agree and 5 denoted strongly agree. Teachers' responses are presented in Table 4.13.

Table 4. 13: ***Teachers' Ratings of the School Academic Environment***

Statement	1	2	3	4	5	MEAN
School environment is conducive for teaching and learning	4 5.6%	7 9.7%	4 5.6%	36 50%	21 29.2%	3.88
Physical space allows for collaboration with other teachers	9 12.5%	7 9.7%	16 22.2%	26 36.1%	14 19.4%	3.4
Classroom arrangement allows teachers to work effectively with learners	4 5.6%	8 11.1%	10 13.9%	41 56.95	9 12.5%	3.60
Resources provided in school are adequate	7 9.7%	13 18.1%	13 18.1%	29 40.3%	10 13.9%	3.25
Principal ensures that school environment is conducive for teachers to plan and teach their lessons	5 6.9%	4 5.6%	9 12.5%	37 51.5%	17 23.6%	3.79
School principal and teachers in my school have a supportive working relationship	3 4.2%	9 12.5%	6 8.3%	36 50%	18 25%	3.79
School environment is inviting	7 9.7%	13 18.1%	13 18.1%	29 40.3%	10 13.9%	3.31
I am happy working in my current school	5 6.9%	13 18.1%	14 19.4%	29 40.3%	11 15.3%	3.39
I like the physical appearance of my school	8 11.1%	11 15.3%	13 18.1%	31 43.1%	9 12.5%	3.31
I like my school environment	5 6.9%	14 19.4%	10 13.9%	31 43.1%	12 16.7%	3.43
I cannot leave this school for another one	21 29.2%	11 15.3%	19 26.4%	15 20.8%	6 8.3%	2.64

N=72

On the statement *school environment is conducive for teaching and learning* 4 (5.6%) teachers strongly disagreed, 7 (9.7%) disagreed, 4 (5.6%) neither agreed nor disagreed, 36 (50%) agreed

and 21 (29.2%) strongly agreed. This shows that majority of teachers 57 (79.2%) agreed that their school environment is conducive for teaching and learning. The mean for the statement is 3.88 which suggests that majority of teachers agreed.

On whether physical space allows for collaboration with other teachers 9 (12.5%) teachers strongly disagreed, 7 (9.7%) disagreed, 16 (22.2%) neither agreed nor disagreed, 26 (36.1%) agreed and 14 (19.4%) strongly agreed. This indicates that slightly over a half of the teachers (55.5%) agreed that the physical space allows for collaboration with other teachers. The mean for the statement is 3.4 which indicates that while some of the teachers in the study agreed with the statements others disagreed. This is further supported by observation data which indicated that the staffrooms in some schools were inappropriate and had dilapidated furniture. Additionally, eight schools did not have departmental offices.

To the statement *classroom arrangement allows teachers to work effectively with learners,* 4 (5.6%) teachers strongly disagreed, 8 (11.1%) disagreed, 10 (13.9%) neither agreed nor disagreed 41 (56.9%) agreed and 9 (12.5%) strongly agreed. This indicates that 50 (69.4%) teachers agreed that classroom arrangement allows teachers to work effectively with learners. The mean for the statement is 3.6 which suggests that a considerable number of teachers agreed with the statement. On whether the resources provided in schools are adequate 7 (9.7%) teachers strongly disagreed, 13 (18.1%) disagreed, 13 (18.1%) neither agreed nor disagreed 29 (47.8%) agreed and 10 (6.9%) strongly agreed. This shows that slightly over a half of the sampled teachers agreed to the statement. The mean score for the statement is 3.25.

To the statement '*principal ensures that school environment is conducive for teachers to plan and teach their lessons',* 5 (6.9%) teachers strongly disagreed, 4 (5.6%) disagreed, 9 (12.5%) neither agreed nor disagreed, 37 (51.4%) agreed and 17 (23.6%) strongly agreed. This shows that majority of the teachers (85%) agreed that school environment is conducive for teachers to

plan and teach their lessons. The mean score for the statement is 3.79 which indicates that majority of teachers agreed that their principals ensure that school environments are conducive for teachers to plan and teach their lessons. On whether principal and teachers in my school have a supportive working relationship 3 (4.2%) teachers strongly disagreed, 9 (12.5%) disagreed, 6 (8.3%) neither agreed nor disagreed, 36 (50%) agreed while 18 (25%) strongly agreed. This shows that 12 (16.7%) teachers disagreed, 6 (8.3%) were neutral and 54 (75%) agreed to the statement that principal and teachers have a supportive working relationship. The mean score for the statement is 3.79 which suggests that majority of teachers agreed that their principals and teachers had supportive working relationships.

To the statement *school environment is inviting* 7 (9.7%) teachers strongly disagreed, 13 (18.1%) disagreed, 13 (18.1%) neither agreed nor disagreed, 29 (40.3%) agreed while 10 (13.9%) strongly agreed. This indicates that barely a half of the teachers agreed to the statement. The mean for the statement is 3.31. On whether teachers were happy working in their current stations 5 (6.9%) teachers strongly disagreed, 13 (18.1%) disagreed, 14 (19.4%) neither agreed nor disagreed, 29 (40.3%) agreed while 11 (15.3%) strongly agreed. This shows that slightly over a half of teachers 40 (55.6%) agreed that they were happy working in their current station while a quarter of the sampled teachers disagreed with the statement. The mean score for this statement is 3.39.

On the question '*I like the physical appearance of my school* 8 (11.1%) teachers strongly disagreed, 11(15.3%) disagreed, 13 (18.1%) neither agreed nor disagreed, 31 (43.1%) agreed while 9 (12.5%) strongly agreed. The mean score for the statement is 3.31 which indicates that teachers were generally neutral. To the statement *I like my school environment* 5 (6.9%) teachers strongly disagreed, 14 (19.4%) disagreed, 10 (13.9%) neither agreed nor disagreed, 31 (43.1%) agreed while 12 (16.7%) strongly agreed. The mean for the statement is 3.43. This indicates that teachers neither agreed nor disagreed to the statement.

On whether the teachers could not leave their current school for another one 21 (29.2%) teachers strongly disagreed, 11 (15.3%) disagreed, and 19 (26.4%) neither agreed nor disagreed, 15 (20. 8%) agreed while 6 (8.3%) strongly agreed. The mean for this statement is 2.64. The majority of the teachers disagreed that they could not leave their current school for another one which indicates that given an opportunity they could leave their current school for another one. Majority of teachers (79.2%) indicated that school environment is conducive for teaching and learning. Teachers' responses suggest that teachers considered the school environment to be favourable for teaching and learning. Their responses indicate that they considered the school environment conducive for teaching and learning even schools that lacked major facilities like laboratories. This may be explained by the fact that a teacher is expected to use their creativity to ensure students learn. The responses to this statement are in line with teachers' responses to the statement' *principal ensures that school environment is conducive for teachers to plan and teach their lesson* with which three quarters of teachers agreed.

A favourable teaching–learning environment is devoid of conflicts and indiscipline thus giving teachers adequate time to plan for and teach their lesson. A conducive school environment allows teacher to engage with other teachers to enhance their teaching. School environment should be conducive for teaching and learning as this enhances the utilization of instructional time (Weber, 1987). According to Day and Sammon (2014) a conducive school environment not only enhances teaching and learning but also the well-being of teachers and learners as they also develop social ties with colleagues. It is however important to note that the number of teachers who agreed with most of the statement is only slightly over a half except for the statements; *school environment is conducive for teaching and learning, the school principal and teachers in my school have a supportive working relationship.* This implies that a considerable number of teachers did not consider school environment as ideal especially the physical aspect.

More than half of the teachers (69.45%) indicated that classroom arrangement allow teachers to work effectively with learners. Teachers' responses to this statement converges with researcher's observation that confirmed that in eleven (11) schools, classes were adequate with lockers arranged in a way that allowed passage in between rows. Appropriate classroom arrangement allows teachers to access all parts of a classroom and address learning difficulties during lessons.

Slightly over a half of the sampled teachers indicated that physical spaces in their schools allowed for collaboration with other teachers. Teachers' responses support observation data which revealed that some schools lacked departmental offices and the staffrooms were not appropriate. Other than establishing routines and structures that support teachers' collaboration principals need to ensure that physical spaces to support teachers to work together are available. Such spaces include departmental offices and staffrooms which Vukovic (2017) pinpoints as being critical in enhancing staff wellbeing, cultivating a sense of community and connectedness among teachers. The number of teachers that agreed to this statement ties well with the number that agreed with the statements: *I like the physical appearance of my school and resources provided in school are adequate* to which only half of the teachers in the sample agreed with. Interestingly three quarter of the teachers agreed with the statement '*principal ensures that school environment is conducive for teachers to plan and teach their lessons'*. This suggests that although principals in most schools in the sample supported teachers to carry out their work, physical environments in a considerable number of schools were not adequate.

The high percentage of teachers indicating that the principal and teachers in their school had a supportive working relationship may explain teachers' responses that the school environment is conducive for teaching and learning. Support from the supervisor and colleagues makes the work environment conducive which may enhance teachers' productivity. When principal maintains supportive relationship with teachers it motivates them to focus on the school goal

(Sciullo, 2016). Further, Blum (2005) observes that mutual relationship between principal and the teachers enhances teachers' efficacy in their work. Effective teaching enhances learning and eventually academic achievement. Facilitating teachers' collaboration enriches the school environment which in turn may results to retention of effective and experienced teachers and eventually enhance teachers' masterly of content as well as pedagogical skills (Johnston & Tsai, 2018).

The statement *I cannot leave this school for another one* recorded the highest number of teachers who disagreed with the statement. This indicates that given opportunity these teachers would transfer to other schools. The responses to this statement may be explained by teachers' responses to the other statements with which a considerable number of teachers did not agree. This suggests that although the teachers considered the school environment conducive for teaching and learning there were other factors that would prompt their transfer to other schools.

4.5.1 Principals' Efforts to Enhance the School Academic Environment

The study sought to determine whether the teachers had noted any effort by the principal to enhance academic environments during their stay in their schools. Nearly all the teachers (64) accounting for 88.9% of the sampled teachers indicated that they had seen efforts by their principals to improve the school environments while 8 (11.1%) of the teachers indicated that they had not. This shows that the majority of teachers reported that there were efforts by their principals to enhance academic environment in their school.

An enhanced academic environment influences teaching and learning which results to improved academic achievement. Enhancing the school environment promotes teachers' professionalism, efficacy and job satisfaction (Day & Sammons,2014). Additionally, it enhances teachers' interaction with the learners. This observation supports Usaini et al., (2015)

who argue that there is a positive correlation between school environment and academic performance.

Further teachers were asked to indicate the aspect of school academic environment that principals had improved. Their responses are indicated in Table 4.14.

Table 4. 14: Aspects of the School Environment enhanced by the Principal

Statement	Yes	No
Improved physical environment	61 (84.7%)	11 (15.3%)
Improved general outlook	56 (77.8%)	16 (22.2%)
Enhanced relationship by building trust amongst teachers and learners	55 (76.4%)	17 (23.6%)
Promoted students discipline	55 (76.4%)	17 (23.6%)
Enhanced instructional materials	56 (77.8%)	16 (22.2%)

n=72

Table 4.14 shows that 61 (84.7%) teachers indicated that the principal had made efforts to enhance the physical environment while 11(15.3%) teachers indicated that they had not. This indicates that majority of teachers reported that their principals had made efforts to improve the school physical environments. Enhanced physical environments not only facilitate teaching but also motivate learners. An enriched physical environment enables teachers to adopt teaching practices that fully engage the learners which creates more learning opportunities.

Most of the teachers 56 (77.8%) indicated that their principals had enhanced the general outlook of their schools while 16 (22.2%) teachers indicated that they had not. The majority of teachers indicated that their principal had enhanced the general outlook of their schools. This suggests that principals have improved the physical environment as well as improved academic performance. School environments should be exciting, inviting and welcoming (Zammit et al.,

2008). When the school general outlook is improved, teachers and learners may be attached to the school, which may translate into improved teaching and learning.

Majority of the teachers (76.4%) indicated that their principal had enhanced relationship with teachers and learners by building trust and respect while 23.6% indicated that they had not. This shows that majority of the teachers indicated that their principals had enhanced relation with teachers and learners by building trust and respect. When students trust and respect their teachers it impacts positively on their learning as they would be more receptive to their teaching. Further, Korir and Kemboi (2014) observe that students who trust their teachers are motivated to learn which impacts positively on their academic attainment. Moreover, trust between teachers and the principal enhance their working relations which may enhance their teaching and school environments. Teachers who feel that their principal trust them are motivated (Zammit et al, 2008) and take an active role in building collaborative environment that support learning. In such environment learners can consult teachers whenever they need to without feeling intimated. According to Chen (2018) creating a friendly work environment enables teachers to foster positive attitudes towards teaching.

More than three quarters of the teachers (55) accounting for 76.4% indicated that principals promoted students discipline while 17 (23.4%) indicated that they do not. This concurs with learners' responses that principal encouraged them to behave well. Maintaining discipline optimizes teaching and learning as no time is spent addressing misbehaviour. Principals may promote students discipline by enforcing school rules that influence students' behaviour and communicating the same to them. Other than instituting rules principals should also support teachers in enforcing them.

Majority of the teachers, 56 (77.8%) indicated that their principals had enhanced instructional materials while 16 (22.2%) indicated that they had not. This agrees with teachers' ratings of

most of the teaching-learning materials as adequate. Adequacy of teaching-learning resources promotes learning and eventually performance if the resources are utilized fully. Although the government in Kenya provides resources for schools, the principals are responsible for the instructional budget. They requisition materials required for instruction.

Further the study sought to establish aspects of the school environments that the teachers wanted improved. The teachers indicated that the following areas needed to be improved; toilets, extra classrooms for optional subjects, laboratories, pavements, departmental offices and kitchens. Conducive school environments enhance teachers work performance and students' academic performance.

4.5.2 Aggregation of Teachers' Ratings of the School Academic Environment

Teachers' responses to various indicators of the school environment were aggregated and a composite index obtained to indicate whether they considered the school environment favourable or not. There were 11 statements which implied that the scores ranged from a minimum of 11 which would have occurred if a teacher strongly disagreed with all the statements and a maximum of 55 if a teacher strongly agreed with all the statements. A score of 33 was considered the cut-off point separating favourable and unfavourable perceptions of the school academic environment. The results of the analysis are shown in Table 4.15.

Table 4.15: Aggregation of Teachers' Ratings of the School environment

	N	Minimum	Maximum	Mean	Std Deviation
Teachers' perception	72	11	55	37.93	12.7738
Valid N (List wise)	72				

Analysis shows that the mean index of teachers' perceptions of the school environment is 37.93 which is slightly higher than the average score of 33. This indicates that teachers considered the school environment to be moderately favourable. This implies that even though teachers did not consider school environments ideal especially the physical aspect most school environments supported teaching and learning. A favourable perception of the school environment suggests the work environment is conducive for teaching and learning. A standard deviation of 12.7738 indicates that there was variability in teachers' responses which is supported by observation data that some schools were slightly better equipped than others which may explain the variation in teachers' ratings of school environments.

Equally learners were asked to rate the school environment. Their rating was on a five-point scale using 12 statements where 1 denoted strongly disagreed, 2 denoted disagree, 3 indicated neither agree nor disagree, 4 denoted agree and 5 denoted strongly agree. An aggregation of the mean was then obtained to indicate the mean of learners' perceptions of the environment. Learners' responses are presented in table 4.16.

Table 4. 16: Leaners' Rating of the School Academic Environment

Statement	1	2	3	4	5	Mean
School environment is friendly	25	30	42	112	113	3.8
	7.8%	9.3%	13%	34.8%	35.1%	
Teachers in my school are encouraging	6	16	30	108	162	4.25
	1.9%	5.0%	9.3%	33.5%	50.3%	
I find it easy to discuss academic matters with my teachers	24	37	45	112	104	3.73
	7.5%	11.5%	14%	34.8%	32.3%	
I enjoy learning in my school	20	18	24	98	162	4.13
	6.2%	5.6%	7.5%	30.4%	50.3%	
Most of the materials required for learning are available in my school	40	44	43	104	91	3.5
	12.4%	13.7%	13.4%	32.3%	28.3%	
I enjoy school most of the time	11	16	29	115	151	4.18
	3.4%	5.0%	9.0%	35.7%	46.9%	
I am proud of my school	21	10	16	91	184	4.26
	6.5%	3.1%	5.0%	28.3%	57.1%	
I feel that I belong to this school	17	19	25	93	168	4.17
	5.3%	5.9%	7.8%	28.9%	52.2%	
Students in my school are well behaved	33	35	47	115	92	3.61
	10.2%	10.9%	14.6%	35.7%	28.6%	
My principal is mostly in school	13	25	25	97	162	4.15
	4.0%	7.8%	7.8%	30.1%	50.3%	
Our principal encourages us to work hard in our studies	4	3	3	74	238	4.67
	1.2%	0.9%	0.9%	23%	73.9%	
School physical appearance is attractive	55	30	34	103	100	3.51
	17.1%	9.3%	10.6%	32%	31.1%	

n=322

The study sought to establish the extent to which students considered school environment friendly. Twenty-five learners (7.8%) strongly disagreed, 30 (9.3%) disagreed, 42 (13%) neither agreed nor disagreed, 112 (34.8%) agreed while 113 (35.1%) strongly agreed. This shows that majority of learners (69.9%) agreed that school environment was friendly. The mean for the statement is 3.8 which indicates that majority of students agreed that school environments are conducive. On whether teachers in the school are encouraging 6 (1.9%) students strongly disagreed, 16 (5%) disagreed, 30 (39.3%) neither agreed nor disagreed, 108 (33.5%) agreed while 162 (50.3%) strongly agreed. This shows that nearly all students in the sample (83.8%) agreed that teachers in their schools were encouraging. The mean for the statement is 4.24 indicating that majority of students agreed to the statement *'Teachers in my schools are encouraging'*.

To the statement '*I find it easy to discuss academic matters with teachers',* 24 (7.5%) students strongly disagreed, 37 (11.5%) disagreed, 45 (14%) neither agreed nor disagreed, 112 (34.8%) agreed while 104 (32.3%) strongly agreed. The mean for the statement is 3.73 which suggests that more than a half of the sampled learners agreed to the statement '*I find it easy to discuss academic matters with teachers'*. On whether students enjoy learning in their school 20 (6.2%) students strongly disagreed, 18 (5.6%) disagreed, 24 (7.5%) neither agreed nor disagreed, 98 (30.4%) agreed and 162 (50.3%) strongly agreed. The statement posted a mean of 4.13 which shows that most of the students agreed with the statement' *I enjoy learning in my school'*.

On whether most of the materials required for learning are available in my school 40 (12.4%) students strongly disagreed, 44 (13.7%) disagreed, 43 (13.4%) neither agreed nor disagreed, 104 (32.3%) agreed and 91 (28.3%) strongly agreed. The mean for the statement is 3.6 suggesting that slightly more than a half of the studied students agreed that materials required for learning are available in their schools. On the statement I enjoy school most of the time 11 (3.4%) students strongly disagreed, 16 (5%) agreed, 29 (9%) neither agreed nor disagreed, 115

(35.7%) agreed and 151 (46.9%) strongly agreed. The statement had a mean of 4.17 indicating that most students agreed to the statement '*I enjoy school most of the time'*.

To the statement '*I am proud of my school* '21 (6.5%) students strongly disagreed, 10 (3.1%) disagreed, 16 (5%) neither agreed nor disagreed, 91 (28.3%) agreed and 184 (57.1%) strongly agreed. Students' responses to this statement indicate that majority of the students (82.4%) agreed to the statement. The mean for the statement is 4.26 which indicates that most of the students agreed that they were proud of their school. To the statement '*I feel I belong to this school* '17 (5.3%) students strongly disagreed, 19 (5.9%) agreed, 25 (7.8%) neither agreed nor disagreed 93 (28.9%) agreed and 168 (52.2%) strongly agreed. This shows that majority of the students (81.1%) agreed with the statement *'I feel I belong to this school'*. The mean for the statement is 4.17 which shows that a large portion of sampled students agreed that they were proud to be associated with their school.

On whether the students in their schools are well behaved 33 (10.2%) students strongly disagreed, 35 (10%) disagreed, 47 (14.6%) neither agreed nor disagreed, 115 (35.7%) agreed while 92 (28.6%) strongly agreed. This shows that majority of the students agreed to the statement '*students in my school are well behaved'*. The statement posted a mean of 3.6.

As to whether principal is always in schools 13 (4%) students strongly disagreed, 25 (7.8%) disagreed, 25 (7.8%) neither agreed nor disagreed, 97 (30.1%) agreed and 162 (50.3%) strongly agreed. This indicates that nearly all students (80.4%) agreed that their principals were in school most of the time. The mean for the statement is 4.15 indicating that most of the students agreed to the statement 'My *principal is always in school*.'

On whether the principals encourage students to work hard in their studies 4 (1.2%) students strongly disagreed, 3 (0.9%) disagreed, 3 (0.9%) neither agreed nor disagreed, 74 (23%) agreed and 238 (73.9%) strongly agreed. Nearly all students (96.9%) agreed that their principals

encouraged them to work hard in their studies. The mean for the statement is 4.67 which shows that nearly all students agreed with the statement '*Our principal encourages us to work hard in our studies'*. Lastly on whether the school physical appearance is attractive 55 (17.1%) students strongly disagreed, 30 (9.3%) disagreed, 34 (10.6%) neither agreed nor disagreed, 103 (32%) agreed and 100 (31.1%) strongly agreed. This shows that more than a half of learners (63.1%) in the study agreed to the statement '*school physical appearance is attractive'*. The mean for the responses is 3.51 indicating that on average a considerable number of students agreed with the statement '*school physical appearance is attractive'*

Majority of students (81.7%) in the sample indicated that school environments are friendly. Learners' responses indicate that they perceived school environments as favourable. It is interesting to note that even in schools where the physical environment was not adequate students rated the school environment highly as indicated by the means for the various statements. This may be because school offers adolescents opportunity to belong to groups and to build social relationships with peers as explained by O'Brien and Bowles (2012). Going by students' ages majority of the sampled students are adolescents, a stage during which they need to develop self-esteem, sense of belonging and confidence by feeling accepted and acknowledged by peers and this is important as they transition into adulthood. It may also suggest that the teachers, principal and other members of school are approachable and students are able to discuss challenges they may be experiencing.

A favourable attitude towards the school environment is important as it implies that learners are attached to their schools. This is supported by their responses to the statement: *I enjoy school most of the time, I am proud of my school and I feel that i belong to this school,* to which nearly all students in the sample agreed to. The feeling of belongingness indicates that learners are attached to their school. According to Lee et al., (2012) students learn more when they are attached to their school. Interaction between students and teachers influences their attachment

with their schools (Lee, et al., 2012). Attachment with the school enhances students learning as espoused by Blum (2005). Attachment to school enhances students' achievement as students who are attached to their school tend to attend school regularly and attempt school work. This argument supports Blum (2005) that students who are attached to their school are academically engaged and enjoy learning. Feelings of acceptance and belonging instil confidence and responsibility in learners. It makes learners proud of their school (Smith & Amushigamo, 2016) which may enhance their attendance and impact positively on their learning.

Majority of students (83.8%) indicated that teachers in their school were supportive. Instructional leaders should create conducive school environments that support learning by inspiring teachers to be supportive to learners. Principal should model expected behaviour in regards to handling and offering support to learners. By being supportive instructional leaders inspires teachers to cultivate students' self-esteem, morale and sense of belonging. Teachers' support plays a critical role in enhancing positive learners' perceptions of their school environments. Students who receive teachers' support feel at ease in school and consult their teachers freely. According to Lee et al. (2012) when students view their teachers' attitudes towards them as positive, they tend to have better learning outcomes. The findings of this study negate findings by Groves and Welsh (2010) who found that teachers were unsupportive and dismissed students quickly and failed to address their needs. Lack of teachers' supports may deter learning as learners may not be receptive to teaching. Learners may also perceive lack of support as incompetency and may fail to trust their teachers.

Further, two thirds of the students in the sample indicated that they found it easy to discuss academic matters with their teachers. Discussing academic matters with students may make them perceive their teachers to be interested in their learning which may motivate them to do more in their learning. Learners who perceive teachers to be interested in their success work towards attaining the set goal. In supporting this Amrit et al. (2013) observe that students who

experience teachers' support develop self-esteem and perform better in their academics. Further Malik and Abbas (2018) emphasize the importance of teachers' support to learners which they point out as causing differentiation in learners' academic achievement.

Majority of students (80.4%) agreed to the statement '*my principal is mostly in school'*. Principals' presence in school promotes learning as it also encourages teachers' presence and enhances teachers' morale. Principal's presence in school may promote emotional safety to student especially when students view him or her as a surrogate parent. The responses to this statement corroborate with the responses to the statement principal encourage us to work hard which shows that principals not only maintained high presence in school but also interacted with students even outside classroom. Showing concern for their wellbeing and success in education promotes sense of belonging and acceptance which may cultivate self-esteem which may have positive bearing on learning for adolescent learners. The observation corroborates the findings of Weber (1987) that being available for students and interacting with them helps in connecting all stakeholders in the school, and more importantly the students' interaction with teachers becomes easier. This is further resonated by Al Hosani (2015) who adds that maintaining high visibility accords the principal an opportunity to interact with students during breaks where s/he can guide them accordingly.

4. 5.3 Aggregation of Learners' Rating of the School Academic Environment

Learners' responses to various indicators of the school academic environments were aggregated and a composite index obtained to indicate whether they considered the environment favourable or unfavourable. There were 12 statements which implied that the scores ranged from a minimum of 12 which would have occurred if a student disagreed strongly with all the statements and a maximum of 60 if a student strongly agreed with all the statements. A score of 36 was considered the cut-off point separating favourable and unfavourable perceptions. The results of the analysis are shown in table 4.17.

Table 4. 17: Aggregation of Learners' Rating of the School environment

	N	Minimum	Maximum	Mean	Std Deviation
Learners' perception	322	12	60	47.96	13.717
Valid N (List wise)	322				

The analysis indicates that the mean index of learners' perceptions of the environment was 47.96 which was higher than the average score set at 36. This indicates that the learners considered the academic environments to be favourable. The variation from the mean is 13.717 which is considered high indicating some heterogeneity in learners' perceptions of the academic environment. The high mean index indicates that majority of students were positive about their school environments. Favourable perceptions of the school environments indicate that schools play a critical role in the lives of students. Other than promoting academic growth, schools may also help meet students' emotional, social and physical needs by providing opportunity to interact with other students and to belong to groups such as clubs, games and movements. Students with positive perceptions of school environment perform better academically than those with negative perceptions according to Ahmed et al., (2018) and Malik & Abbas (2018). Perhaps this is so as they are likely to attend school regularly and abide by school rules such as attempting homework and maintaining discipline. Further, Edgerton and Mckechinie (2011) add that positive perceptions of the school environment enhance students' engagement which in part impacts positively on learning and eventually on academic performance.

4.6 Hypotheses Testing

The study sought to find out whether school academic environment is contingent on principals' instructional leadership practices. The researcher tested five null hypotheses to determine whether there is any significant statistical evidence to support this.

***H_{O1a}**: There is no significant association between setting annual academic goals and school academic environment.*

The study sought to establish whether there is a significant association between setting annual academic goals and school academic environments. Data collected from teachers and learners were used to test the hypothesis using Pearson Chi Square (X^2) test of independence at 0.05 significance level. The results of the test for teachers are presented in Table 4.18 and Table 4.19.

Table 4. 18: Association Between Goal Setting and School Academic Environment

			Teachers' perceptions of the School Environment			Total
			Unfavourable	**Undecided**	**Favourable**	
Principal sets	Yes	Count	8	9	33	50
Annual		% of Total	11.11%	12.5%	45.83%	69.44%
Academic	No	Count	6	8	8	22
goals		% of Total	8.33%	11.11%	11.11%	30.53%
Total		Count	14	17	41	72
		% of Total	19.4	23.6%	56.94.%	100

Table 4.18 indicates that out of 50 teachers who indicated that their principal sets annual academic goal 33 which form 45.8% of the sampled teachers rated the school academic environment as favourable, 9 (12.5%) were undecided while 8 (11.1%) rated it as unfavourable.

Majority of teachers who indicated that their principals do not set annual academic goals, 8 (11.1%) were undecided as to whether the school academic environment was favourable or unfavourable while 6 (8.3%) rated school environment as unfavourable and 8 (11.11%) indicated that it was favourable.

Table 4. 19: Association Between Setting Annual Academic Goal and School Academic Environment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.080[a]	2	.011
Likelihood Ratio	8.998	2	.011
Linear-by-Linear Association	7.736	1	.013
N of Valid Cases	72		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.19.

The results in Table 4.19 indicates that the association between principal setting annual academic goal and academic environment was statistically significant, $X^2(2) = 9.080$, $p = .011$, since the p-value is smaller than the designated significance level ($\alpha = 0.05$). This suggests that there is a significant association between setting annual academic goals and school academic environments. Thus the researcher rejected the null hypothesis that stated '*There is no significant association between setting annual academic goals and school academic environments'.* The researcher concluded that there is significant association between setting annual academic goals and school academic environment.

Association between goal setting and school academic environment is affirmed by a positive Chi square value $X^2(2)$ of 9.080 which confirms that the association is not by mere chance but significant. Results of cross tabulation between goal setting and school environments indicate that teachers are more likely to perceive school academic environment as favorable (45.8%)

where principals set goals rather than where they do not (11.1%). Setting goals that outline an action plan (Dotson, 2016) clarifies what teachers ought to do. When principals set clear goals and inspire teachers to own and be committed to them teachers are likely to increase the efforts exerted towards their attainment. As such goals inspire teachers to adopt differentiated strategies that enhance their teaching and promote students' learning. Shared goals promote unity of purpose and promote collegiality and collaboration among teachers (Sun & Leithwood, 2015). Thus teachers direct their coordinated efforts towards achieving the set goal. As such teachers internalize and identify with goals that they are involved in setting as they guide and inspire them to improve classroom practices in their school. Goals inspire teachers to focus their attention on teaching if they are linked to day to day activities directed towards their attainment thus creating a positive school academic environment. Focus on attainment of set goals inspires each teacher to play his/her role in making school a conducive learning space for colleagues and learners. Equally the study sought to establish if setting annual academic goals influence school academic environment as perceived by learners'.

The null hypothesis: **H_{o1b}:** *There is no association between principals' setting annual academic goals and school academic environment* was tested using Chi square. The results of the test are presented in tables 4.20 and 4.21.

Table 4. 20: Contingency Table on Association between Setting Annual Academic Goals and School Academic Environment

Principal Sets Goal		Learners' perceptions of the School Academic Environment					Total
		Quite Unfavorable	Unfavorable	Undecided	Favorable	Quite favorable	
Yes	Count	18	24	36	102	106	286
	% of Total	5.6%	7.5%	11.2%	31.7%	32.9%	88.8%
No	Count	7	6	6	10	7	36
	% of Total	2.2%	1.9%	1.9%	3.1%	2.2%	11.2%
Total	Count	25	30	42	112	113	322
	% of Total	7.8%	9.3%	13.0%	34.8%	35.1%	100.0 %

Table 4.20 shows that out of 286 (88.8%) learners who confirmed that the principals set annual academic goals; (13.1%) learners rated school environment as unfavorable, 36 (11.2%) learners were undecided while 208 (64.6%) rated it as favorable. Amongst the 36 (11.2%) learners who indicated that the principals do not set annual academic goals; 13 (4.1%) learners indicated that school academic environment was unfavorable, 6 (1.9%) were undecided while to the remaining 14 (4.4%) indicated that school academic environment was favorable.

Table 4. 21: Association between Setting Annual Academic Goal and Academic Environment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.281[a]	4	.010
Likelihood Ratio	11.554	4	.021
Linear-by-Linear Association	12.717	1	.000
No of Valid Cases	322		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 2.80.

Table 4.21 shows a significant association between principals' setting annual academic goal and learners' ratings of academic environment, $X^2(4) = 13.281$, P=.010, since the P-value is smaller than the significance level at which the hypothesis was tested ($\alpha = 0.05$). This indicates that there is a significant relationship between setting annual academic goals and learners' perceptions of the school academic environment. Thus the Null hypothesis that stated' *There is no association between setting annual academic goals and learners perceptions of the school academic environment' was rejected.* The researcher concluded that there is a significant association between setting annual academic goals and school academic environments as perceived by learners.

In this study it is evident that setting academic goals influences school academic environment. The results of the test indicate that learners were more likely to perceive school academic environment as favorable where principals set annual academic goals (64.6%) than where principals do not set annual academic goals (4.1%). The large chi square value of 13.281 affirms that indeed there is a significant association between setting annual academic goals and school academic environment

Goal setting enhances the academic environment as it directs learners' efforts towards the desired academic outcomes (Alig-Mielcarek, 2003) and inspires them to take actions towards achieving the set goal. Goals provide direction and motivation for learners. If learners embrace the set goals they devise strategies to attain them. This may imply that they would perceive school environment as friendly, attend school as expected, be keen in their school work and would be more disciplined. Focusing on learning may influence academic attainment positively.

The study further sought to establish whether there is any association between monitoring instructions and school academic environment. The null hypothesis: ***H_{02}:*** *There is no association between monitoring instruction and school academic environment* was tested using Pearson Chi square and the results of the test are shown in tables 4.22 and 4.23.

Table 4. 22 Contigency Table on Association Between Monitoring Instruction and School Academic Environment

		School Academic Environment			
Principal Monitor Instruction		**Unfavourable**	**Undecided**	**Favourable**	**Total**
Yes	Count	5	6	30	41
	% of Total	6.9%	8.3%	41.7%	56.9%
No	Count	9	11	11	31
	% of Total	12.5%	15.3%	15.3%	43.1%
Total	Count	14	17	41	72
	% of Total	19.4%	23.6%	56.9%	100.0%

Table 4.22 shows that out of 41 (56.9%) teachers who indicated that their principals monitor teaching and learning 5 (6.9%) disagreed, 6 (8.3%) were undecided and 30 (41.7%) teachers agreed that the school academic environment is favorable. Similarly, amongst the 31 (43.1%) teachers who indicated that the principals do not monitor teaching and learning, 9 (12.5%)

teachers disagreed, 11 (15.3%) were undecided and 11 (15.3%) agreed that the school academic environment is favorable.

Table 4. 23 Association Between Monitoring Instruction and Academic Environment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.227[a]	2	.006
Likelihood Ratio	10.409	2	.005
Linear-by-Linear Association	8.303	1	.004
N of Valid Cases	72		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.03.

Table 4.23 indicates a statistically significant association between principals' monitoring of instruction and teachers' perceptions of academic environment, $X^2(2) = 10.227$, P=.006, since the p-value is smaller than the chosen significance level ($\alpha = 0.05$). This implied that there was enough evidence to suggest association between the variables, and as a result conclude that there is statistically significant association between principals' monitoring of instruction and school academic environment. Thus, the researcher rejected the null hypothesis that stated '*There is no association between monitoring instruction and school academic environment'.* The researcher concluded that there is a significant association between monitoring instruction and teachers' perceptions of the environment.

Cross tabulation between monitoring instruction and school academic environment further confirms the association between the two variables as teachers were more likely to perceive school environment as favourable where principals monitor instruction (41.7%) than where they do not (15.3%). A large Chi square value of 10.227 further confirms that association

between monitoring instruction and school environment is significant and not by chance. If teachers view monitoring instruction as enriching their professional practice and growth they are likely to perceive school academic environments as conducive. Teachers who view monitoring instruction as geared towards enhancing their classroom practices and promoting professional growth may perceive their school academic environments as conducive. By monitoring instruction principals guide teachers on how to improve their classroom practices which optimises learning.

Monitoring instruction ensures that teachers are careful about teaching (Nzobonimpa, 2011) as such they would plan adequately to enrich their teaching and to create more learning opportunities for learners. Monitoring instruction ensures that teachers attend lessons and that syllabi are covered within stipulated time lines. Effective teaching ensures learners are academically engaged which in turn impacts positively on learners' academic achievement. For the teacher, monitoring instruction that improves their classroom practices enhance their perceptions of school academic environment.

The study further sought to establish whether there is a significant association between promotion of teachers' professional development and school academic environment. The hypothesis: ***$H_0$3:*** *There is no association between promotion of teachers' professional development and school academic environment* was tested using Pearson Chi square. The results are presented in table 4.24 and 4.25.

Table 4. 24 Contigency Table on Association Between Promotion of Teacher Professional Development and School Academic Environment

		School Academic Environment			
Promotion of Professional Development		Unfavourable	Undecided	Favourable	Total
Yes	Count	8	9	34	51
	% of Total	11.1%	12.5%	47.2%	72.2%
No	Count	6	8	7	21
	% of Total	8.3%	11.1%	9.7%	27.8%
Total	Count	14	17	41	72
	% of Total	19.4%	23.6%	56.9%	100.0%

Table 4.24 shows that out of 52 (72.2%) teachers who confirmed that the principals promoted teachers' professional development, 8 (11.1%) teachers disagreed, 9 (12.5%) teachers were undecided and 34 (47.2%) agreed that the school academic environment is favorable. On the other hand, amongst the 20 (27.8%) teachers who indicated that principals do not participated in teachers' professional development; 6 (8.3%) teachers disagreed, 8 (11.1%) were undecided and 7 (9.7%) agreed that the school academic environment is favorable.

Table 4. 25 Association Between Principal's Promotion of Teachers Professional Development and School Academic Environment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.807[a]	2	.033
Likelihood Ratio	6.817	2	.033
Linear-by-Linear Association	5.027	1	.025
N of Valid Cases	72		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 4.08.

The Pearson Chi-Square in table 4.25 indicates a significant association between principals' promotion of teachers' professional development and teachers' perceptions of the academic environment, $X^2(2) = 6.807$, $p = .033$, since the p-value is smaller than the chosen significance level ($\alpha = 0.05$). This suggests that there is an association between the principals' promotion of teachers' professional development and the teachers' perceptions of school academic environment. Based on this finding the researcher rejects the null hypothesis that stated '*There is no association between promotion of teachers' professional development and school academic environment'* and concludes that there is a significant association between promotion of teachers' professional development and school academic environment.

From table 4.24 it is apparent that majority of teachers who indicated that principal promoted teachers' professional development rated school environment as favorable. Teachers may prefer school environments where the principal is interested in their professional development (47.2%) than where they are not (9.7%). Chi square value of 6.807 further confirms that association between promotion of teachers' professional development and school environment is significant.

Promoting teachers' professional development communicates to teachers that their principal is interested in their professional growth. This may enhance teachers' attachment with their work, learners and school. Attachment with learners, work and school may motivate teachers to go out of their way to be innovative and adopt effective teaching strategies. Teachers may be more attached to schools that cultivate their professional growth which in turn may create stability for learners in the school. When principals support teachers' professional growth it motivates them to be more innovative in teaching (Lee et al. 2012). Promoting teachers' professional development communicates to them that their principal expects better and effective teaching (Mizell, 2010).

If professional development is organized for all teachers in the school for different purposes and different times it makes the school more focused and effective in promoting learning. School wide professional growth for teachers promote a productive environment and better results for learners as it promotes effective teaching and learning in all subjects. Promoting teachers' professional development helps them to improve their classroom practices which makes schools learning spaces for teachers and learners.

Further the study sought to establish whether there is a significant association between promotion of collaboration and school academic environment.

H_{o4} *There is no association between principal promotion of collaboration and school academic environment.*

Pearson Chi Square test was computed between the scores of promotion of collaboration and academic environment. The results of the test are presented in table 4.26 and Table 4.27.

Table 4.26 Contigency Table on Association Between Principals' Promotion of Collaboration Amongst Teachers and School Academic Environment

		Teachers Perception of the school Academic Environment			
Work together With other teachers		**Unfavourable**	**Neither Agree nor Disagree**	**Favourable**	**Total**
Yes	Count	7	9	34	50
	% of Total	9.7%	12.5%	47.2%	69.4%
No	Count	7	8	7	22
	% of Total	9.7%	11.1%	9.7%	30.6%
Total	Count	14	17	41	72
	% of Total	19.4%	23.6%	56.9%	100.0%

Table 4.26 reveals that out of 50 (69.4%) teachers who affirmed that the principals promote collaboration 7(9.7%) teachers disagreed, 9 (12.5%) teachers were undecided and 34 (47.2%) agreed that the school academic environment is conducive. Similarly, amongst the 22 (30.6%)

teachers who indicated that the principals do not promote collaboration; 7 (9.7%) teachers disagreed, 8 (11.1%) were undecided and 7 (9.7%) agreed that the school academic environment is favorable.

Table 4. 27 Association Between Promotion of Teachers' Collaboration and School Academic Environment

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.189[a]	2	.017
Likelihood Ratio	8.238	2	.016
Linear-by-Linear Association	7.049	1	.008
N of Valid Cases	72		

a. 0 cell (0.0%) have expected count less than 5. The minimum expected count is 4.28.

Table 4.27 shows a significant association between principals' promotion of collaboration amongst teachers and teachers' perceptions of the academic environment, $X^2(2) = 8.189$, p=.017, since the p-value is smaller than the significance level ($\alpha = 0.05$) used to test the hypothesis. This shows that there is a significant association between principals' promotion of collaboration amongst teachers and school academic environment. Therefore, the null hypothesis that stated '*There is no association between promotion of collaboration and school academic environment'* was rejected. The researcher therefore, concludes that there is a significant association between principals' promotion of collaboration amongst teachers and school academic environment.

Association between promotion of collaboration and school academic environment is further affirmed by the high numbers of teachers who indicated that principals promoted teachers

working together as they rated school academic environment as favorable (47.2%) while only 9.7% of those who indicated that principals do not promote teachers working together indicated that school environment was unfavorable. Chi square value of 8.189 is large enough to confirm that indeed there is a significant association between promotion of teachers' collaboration and school academic environment.

When principals nurture collaborative teams, teachers learn from each other, develop trust and focus on students learning. Supporting teachers' collaboration creates collegial work environments where teachers can learn and support each other thus facilitating professional growth among teaching staff. Collaboration among teachers cultivate connectedness with colleagues, learners and school, strengthens social ties, care and support for each other. By supporting teachers to work together, principals establish learning teams where the experienced ones can mentor their colleagues. Teachers working in collaborative environments co-operate rather than compete thus they focus on teaching and ensuring that their school succeeds. Additionally, collaboration instills in teachers the collective responsibility of creating conducive environments for the learner. The Chi square test result supports observation by Burns and Lewrie (2016) that collaboration nurtures teachers' professional growth and transform schools into learning environments.

The study sought to establish whether principal's influence on utilization of available resources influence school academic environment. The hypothesis: ***H_{o5}:*** *There is no significant association between principals' influence on utilization of available resources and school academic environment* was tested using Pearson Chi Square test and the test results obtained are presented in the Table 4.28 and Table 4.29.

Table 4. 28: Association Between Principals' Influence on Utilization of Resources and School Academic Environment

Influence Utilization of Available of Resources		Teachers' Perceptions of School Academic Environment			
		Unfavorable	Undecided	Favorable	Total
Yes	Count	5	9	31	45
	% of Total	6.9%	12.5%	43.1%	62.5%
No	Count	9	8	10	27
	% of Total	12.5%	11.1%	13.9%	37.5%
Total	Count	14	17	41	72
	% of Total	19.4%	23.6%	56.9%	100.0%

Table 4.28 shows that out of 45 (62.5%) teachers who indicated that the principals influence utilization of available resources; 5 (6.9%) teachers disagreed, 9 (12.5%) teachers were undecided while 31 (43.1%) agreed that the school academic environment was favorable. Equally, among the 27 (37.5%) teachers who indicated that the principals do not influence utilization of resources, 9 (12.5%) teachers disagreed, 8 (11.1%) were undecided and 10 (13.9%) agreed that the school academic environment is favorable.

Table 4.29 Association Between Principals' Influence on Utilisation of Available Resources and School Academic Environment

	Value	Df	Asymp.sig.(2-sided)
	7.955[a]	2	.019
Likelihood Ratio	7.954	2	.019
Linear by linear association	7.807	1	.005
N of Valid Cases	72		

a.0 cells (0.0%) have expected count less than 5 . The minimum expected count is 5.25.

Table 4.29 reveals a statistically significant association between principals' influence on utilization of available resources and school academic environment, $X^2(2) = .7.955$, p=.019, since the p-value is smaller than the significance level ($\alpha = 0.05$) used to test the hypothesis. The hypothesis that stated '*There is no association between principal's influence of utilization of available resources and school academic environment'* was rejected. Thus, the researcher concluded that there is a significant association between principals' influence on utilization of resources and school environment.

Table 4. 28 shows that majority of teachers who indicated that principal influence utilization of available resources also indicated that school environment was favorable. This suggests an association between principals' influence of utilization of available resources and school environment. Teachers are more likely to perceive school environment as conducive where principal influences utilization of available resources (43.1%) than where they do not (13.9%). Pearson Chi square test yielded a positive value of 7.955 which is significant at 0.05 level of significance. This further affirms that association between principal's influence on utilization of available resources and school environment is significant and not by mere chance.

Principals' efforts to maximize utilization of available resources enhance school academic environments. Availability of resources supports teachers' instructional effort (Stronge, 2008) as they create enabling environments for teachers to plan and teach their lessons with ease. Teachers are more likely to perceive school environments as positive where principals not only provide them with basic instructional needs but also devise strategies to optimally utilize available resources. Effective utilisation of available resources influences teachers' motivation which in turn impacts their work performance and students' learning (Mugure, 2012).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDIES

5.1 Introduction

This chapter contains a summary of the major findings, conclusions, recommendations and suggestions for further study.

5.2 Summary of the Findings

The study sought to establish the influence of principal's instructional leadership practices on the academic environments in public day secondary schools in Kisii Central Sub-county, Kisii County, Kenya. In particular, the study sought to determine the influence of instructional leadership on academic environment which in this study was operationalized as teaching practices adopted by teachers and learners' academic behaviours. Specifically, it addressed five principal's instructional leadership practices that is setting goals, monitoring instruction, promotion of teachers' professional development, promotion of collaboration among teachers and provision and utilization of teaching learning resources. A summary of findings under each objective is presented in the following sub- sections.

5.2.1 Influence of Principals' Instructional Leadership on School Academic Environment

The study looked at principal's instructional leadership practices and how they influenced school academic environments. The study addressed five areas which were setting annual academic goals, monitoring instruction, promoting teachers' professional development, promoting collaboration among teachers and provision and utilization of teaching-learning resources.

5.2.1.1 Influence of Setting Annual Academic Goals on School Academic Environment

i. The findings overwhelmingly reveal that majority of the principals set annual academic goals for their schools as attested to by 69.4% of the teachers and 88% of the students in the study. The findings further reveal that in most schools, goal setting was a multi-tier activity done at individual student, class, departmental and at school levels. Majority of the teachers (83.3%) indicated that goal setting is a joint activity involving the principal, teachers and learners and in some schools, parents are involved.

ii. Goal setting is informed by previous years' performance in K.C.S.E, students' entry behaviours as well as availability of resources. In some schools, annual academic goals are set the beginning of the year during the first staff meetings while in others it is done during the first class conferences after the first examination in the year. Students are involved at individual level where they set goals per subject. The subject teachers obtain the aggregated scores and the mean scores for the entire class is obtained and used as the school academic goal.

iii. The study further established that there was lack of congruence in stating the school goal by principals, teachers and learners in the same school which reveals that communication and sustenance of the set goal were wanting.

iv. Goal setting majorly influenced syllabi coverage as attested to by majority of teachers (94.4%) while it has the least influence on the number of evaluation tests administered to the learners. Teachers indicated that sustenance of the set goal is done through a variety of strategies with majority (91.7%) indicating that principals ensured that teaching takes place while only slightly over a half (66.7%) of the teachers indicating that principals referred to the set goal during school assemblies and meetings. Majority of the teachers (72.2%) rated the principal as effective in sustaining the school goal as they ensured teaching took place and monitored learners' performance.

v. To inspire teachers to work towards the attainment of the set goals principals recognised teachers during staff meetings and school assemblies. Teachers of the best performed subjects in K.C.S.E were rewarded with the help of the Boards of Management. Principals acted as good examples for teachers to emulate by acting as pace setters. Learners were motivated through rewards for good performance in internal assessments.

5.2.1.2 Influence of Monitoring Instruction on School Academic Environment

i. Although majority of the teachers (88.9%) indicated that monitoring instruction influenced teaching only 56.94% of them indicated that their principals monitored instruction. This may be explained by the fact that checking professional documents such as schemes of work was a shared responsibility between the deputy principal, heads of departments and principals in some schools.

ii. Interviews with principals revealed that various methods of monitoring instruction are employed with majority of the principal using teachers' lesson attendance registers. Checking students' note books was the least practiced strategy.

iii. Lesson observation as an aspect of monitoring instruction was not very popular among teachers and principals and was not conducted frequently as it was impeded by teachers who were not receptive to feedback while other teachers failed to prepare and present themselves for observation.

iv. Majority of teachers indicated that monitoring instructions influenced different aspects of teaching such as class attendance, syllabi coverage and preparation of professional documents. Choice of teaching method and homework given to students, however, were the practices that were least influenced by monitoring instruction.

v. Provision of feedback to teachers after lesson observation was inadequate as it was neither timely or very useful to the majority of teachers.

5.2.1.3 Influence of Promotion of Teachers' Professional Development on School Academic Environment

i. Majority of teachers (72.2%) indicated that their principals supported teachers' professional development while 27.8% indicated that they do not.

ii. Teachers indicated that their principals had supported them to attend teachers' professional development programmes and in some school had offered financial facilitation. However, principals did not indicate having assisted the teachers to implement skills learnt from the training attended.

iii. On principals' efforts to promote teachers' professional development only a quarter of the principals indicated that they had organised in-house training for teachers in ICT. However, a majority of teachers (70.83%) indicated that they had benefitted from professional training programmes two years from the time the study was conducted.

iv. It is interesting to note that more than a half of the sampled teachers indicated that attending teachers' professional development programmes did not enhance mastery of content. The high number of teachers indicating that attending professional development did not enhance their mastery of content may indicate that the trainings attended were not designed to address specific teachers' training needs. Slightly over a half of the sampled teachers, 58.3% indicated that it changed their attitude towards work, 54.2% reported that it enhanced pedagogical skills and for half of the teachers, it influenced classroom management.

5.2.1.4 Influence of Promotion of Collaboration on School Academic Environment

i. Majority of teachers (69.4%) indicated that their principals promoted collaboration among teachers while 30.6% indicated that they did not.

ii. Principals mainly promoted collaboration among teachers by promoting team teaching among teachers in which they also took part. Learners were also allowed to consult any teacher in the school teaching the subject in question.

iii. The study found out that teachers worked together in various activities as indicated by 69.4% of the teachers in the sample. Of the collaborative activities indicated by teachers, preparation of tests and examinations was the most common as indicated by 69.4% of teachers in the study. Teachers also reported that they collaborated in teaching and preparing teaching material as indicated by 68.1% and 66.7% of the teachers respectively while marking tests and examinations was the least practiced collaborative activity as indicated by 65.3% of teachers.

iv. Teachers indicated that working with other teachers influenced a number of aspects of their work with the majority o (81.9%) indicating that it enlightened them in addressing learners' challenges.

5.2.1.5 Influence of Availability and Utilization of Teaching-Learning Resources on School Academic Environment

i. Across all schools, majority of teachers (77.8%) and learners (72.7%) indicated that text books were adequate. The ratio of book: students' ratio was found to be 1:1 in most subjects. However, the study established that in some subjects there were more text books than needed while in other subjects the books were inadequate.

ii. Regarding adequacy of physical resources, there were disparities between schools. While some schools had extra classes for optional subjects, other schools lacked vital

infrastructure such as laboratories, libraries, kitchens and offices for principals and deputy principals.

iii. On influence of the utilization of resources, all principals restricted themselves to text books and teaching-learning time.

   a. Majority of principals indicated that the text books were issued to students at the beginning of the term. Students were allowed to use the text books throughout the term. Form four students were also allowed to borrow books during the school holidays using their parents' identification cards as security.

   b. To enhance utilization of teaching-learning time all principals in the sample indicated that they provided lunch in school to ensure that teachers and learners wasted no time moving outside school to get lunch. Transition time between lessons was reduced by having teachers wait from outside the classroom rather than from the staffroom. Lessons for absent teachers were taken up by those present and recovered upon resumption.

iv. Teachers majorly agreed that principals influence on utilization of resources influenced homework given to students and teaching certain aspects of different subjects.

5.2.2 School Academic Environment

Teachers rated school environment as moderately favourable as indicated by a mean index of 37.93 with the scores deviating from the mean by 12.773 and the average set at 33. Their ratings indicate that although school environments were not ideal they were adequate in supporting teaching and learning. It also shows that there were disparities in perceptions of the school environment as indicated by a standard deviation of 13.717. On their part learners considered school academic environment as conducive as indicated by a mean index of 47.96 with scores deviating from the mean by 13.717 and the average score being 33.

5.2.3 Summary of Hypotheses Testing Results

5.2.3.1 Association Between Goal Setting and School Academic Environment

The study established that there is a statistically significant association between goal setting and school academic environment using Pearson Chi square test. The hypothesis was tested using data collected from teachers and learners. Chi square test yielded a p-value of .011 and a p-value of .010 while tested using data collected from teachers and learners respectively which were smaller than 0.05, the level of significance at which the hypothesis was tested. The researcher rejected the null hypothesis that stated that 'there is no significant association between goal setting and school academic environment' and concluded that there is a significant association between goal setting and school academic environment.

5.2.3.2 Association Between Monitoring Instruction and School Academic Environment

The study established that there is a statistically significant association between principal monitoring instruction and school academic environment using Pearson Chi Square test. The result of the chi test was a p-value of 0.006 which is smaller than 0.05, the level of significance at which the hypothesis was tested. The researcher rejected the null hypothesis' that stated 'there is no association between monitoring instruction and school academic environment' and concluded that monitoring instruction influences school academic environments.

5.2.3.3 Association Between Promotion of Teachers' Professional Development and School Academic Environment

The study established that there is a statistically significant association between promotion of teachers' professional development by the principal and school academic environment using Pearson Chi Square test. The test yielded a p-value of 0.033 which was smaller than 0.05 the level of significance at which the hypothesis was tested. The researcher rejected the null

hypothesis that stated that there is no significant association between promotion of teachers' professional development and school academic environment' and concluded that promotion of teachers' professional development influences school environments in which they work.

5.2.3.4 Association Between Promotion of Collaboration amongst Teachers and Teachers' Perceptions of the School Academic Environment

Association between promotion of collaboration amongst teachers by the principal and school academic environment was established by running a Pearson Chi Square test at 0.05 level of significance which yielded a p-value of 0.017. The Null hypothesis 'There is no significant association between promotion of collaboration amongst teachers and school academic environment was rejected. The researcher concluded that promotion of collaboration amongst teachers influence school academic environment.

5.2.3.5 Association Between Principals Influence on Utilization of Resources and School Academic Environment

Using Pearson Chi Square test the study established that there is a statistically significant association between principals' influence on utilization of resources and school academic environment. The test yielded a p-value of 0.019 which was smaller than 0.05 the level of significance at which the hypothesis was tested. The researcher concluded that when principals are keen in enhancing utilization of available resources the school academic environments are enhanced.

5.3 Conclusion

Principal's instructional leadership practices influence the pertinent aspects of academic environment of a school: teaching practices and learners' academic behaviour.

The researcher made the following conclusions based on the research findings:

i. Goal setting is important in shaping school academic environment. Although goal setting was a common instructional leadership practice it was inadequate as shown by incongruence in stating the set goal by the principal, teachers and learners in the same school. For meaningful goal setting, the set goal must be kept alive throughout the year through constant reference so that it reminds teachers and learners that there is a goal to work towards. As such the principals must devise strategies to help teachers and learners own and identify with the set goals and work towards their attainment.

ii. Monitoring instruction, especially through lesson observation is a useful tool in promoting teachers' professional development. However, as it is, it does not achieve the intended purpose as it is marred by fear of the implications of appraisal reports which may influence the decisions of the teachers' employer regarding teachers' professional growth. Monitoring instruction that is geared towards prompting teachers to renew their teaching practices and to refresh their knowledge in their teaching subjects would go a long way in enhancing learners' academic achievement.

iii. Principals' efforts in promoting teachers' professional growth may not yield much as seminars, workshops and conferences which principals facilitated teachers to attend did not address specific teachers' professional development needs.

iv. Teachers' collaboration seems to enhance teachers work performance as it creates a collegial atmosphere among teachers where they learn from each other.

v. School leadership plays a critical role in influencing teaching and learning by assembling resources and inspiring teachers and learners to utilize them effectively. Even though government's effort in provision of text books to secondary schools is evident, the currency and the relevance of data used in supplying the resources is questionable as there was excess supply of text books in certain subjects while others were lacking. The distribution of vital physical infrastructures like libraries and laboratories is unstructured resulting in inequity among schools.

5.4 Recommendations

Based on the findings of the study the researcher made the following recommendations:

i. Principals need to maintain a collective focus on the set academic goals through constant reminders during formal and informal meetings with teachers and learners. Principals should endeavour to reduce teacher isolation by enhancing school environments and bringing everyone on board to direct their efforts towards the school common goal. Mid-term and quarterly review of the gains made on the activities directed towards attainment of the set goals should also be carried out to remind teachers and learners of their roles in meeting set goals. Principals should be more emphatic in sustaining school annual academic goals so as to influence teachers and learners to own and work towards their attainment.

ii. The Ministry of Education and Teachers Service Commission should sensitize teachers on the importance of lesson observation. The stake holders should direct their efforts in changing the teachers' mind-sets on the role of lesson observation in their professional development as well as creating learning opportunities for the learners. Principals should redesign monitoring instruction in ways that their intentions are not construed to be punitive or seen to be influenced only by the existing TSC policy, but rather by the need to enhance teachers' professional growth and enhance teaching and learning

iii. Teachers' Service Commission should train principals, deputy principals and heads of departments on how to package feedback given to teachers so as to optimize the benefits of lesson observation for the teacher and the learners. Heads of departments should also be trained on the essence of conducting lesson observation. Additionally, principals' effort to have distributed instructional leadership should be supported by the Teachers Service Commission. Adequate sensitization should be

carried out for heads of departments who have specialised subject knowledge in order to underpin instructional leadership efficacy and specifically monitoring of instruction. Principals should develop in house professional development programmes for teachers based on their assessment of teachers' training needs following lesson observation so as to build a strong professional workforce if they are to attain set goals.

iv. Principals should enhance structures that support teachers' collaboration for teachers to meaningfully work together in order to maximize learning opportunities for learners.

v. Supply of text books, teachers and other teaching-learning resources should be informed by accurate and current data from the principals and the government should structure distribution of resources to ensure parity among schools and to facilitate instruction appropriately.

5.5 Suggestions for Further Studies

The current study focused on influence of principal's instructional leadership practices on academic environments in public day secondary schools. The study did not look at other roles of the principal that may influence academic achievement. The researcher recommends that further studies could be carried out in the following areas:

i. Other roles of principals that influence school academic environments.

ii. Influence of distributed instructional leadership on teachers' perceptions of school environments.

iii. Influence of distributed leadership on school effectiveness.

iv. A replica of this study in public boarding schools, private day and boarding schools and in other geographical regions.

REFERENCES

Adekeye, A. J., & Eleojo, A. P. Applicability of sampling techniques in social sciences. *Net Journal of Social Sciences,* 7(4): 101-108.

Agbejoye, S. J., Aleburu, O. J., Olugbaike, K. J., & Ogunjimi, A. D. (2015, May). 'Effect of Students' Gender, School Environment and Teachers on the Students' Learning Outcomes in Basic Technology in Secondary Schools in Lagos, Nigeria'. In *International Conference on Contemporary Issues in Education,* 17-19.

Ahmed, Y., Taha, M. H., Al-Neel, S., & Gaffar, A. M. (2018). Students' perception of the learning environment and its relation to their study year and performance in Sudan. *International journal of medical education*, *9*, 145-150.

Albaum, G., Roster, C., Yu, J. H., & Rogers, R. D. (2007). Simple rating scale formats: Exploring extreme response. *International Journal of Market Research*, *49*(5), 1-10.

Albashir, M., Kabir, R. & Rahman, I. (2016) The value and effectiveness of feedback in improving students learning and professionalizing teaching in higher education. *Journal of Education and practice* 2(16) 38-41.

Amrit, T., Cohen, J., Shawn, G. & Ann, H. (2013*)* A review of school climate Research. *Review of educational research 20(10) 1*-30.

Alig-Mielcarek, J. M. (2003). *A model of school success: Instructional leadership, academic press, and student achievement*. The Ohio State University.

Arul, L. & Vimala, A. (2012). School environment & academic performance of standard six students, *Journal of Educational and Industrial Studies in the World,* 2(3)210-215.

Bell, R. (2013) *Hungry children at higher risk of poor performance*. Michigan: Michigan state university Extension.

Bendikinson, L., Robinson V. & Hattie, J. (2012) Principal Instructional leadership and performance in secondary school *set1* downloaded from nzer.org.nz.

Blank, R. K., & De Las Alas, N. Society for Research on Educational Effectiveness. 2010. *Effects of teacher professional development on gains in student achievement: How meta-analysis provides scientific evidence useful to education leaders*.

Blasé, J, & Blasé J. (2004). *Handbook of Instructional Leadership: How Successful Principals Promote Teaching and Learning (2nd ed.).* Thousand Oaks, CA: Corwin Press.

Blum, R. (2005). Best practices: Building blocks for enhancing school environment [Monograph Series]. *Retrieved from Johns Hopkins University, Bloomberg School of Public Health Military Child Initiative*

Brolund, L. (2016). Student Success through Instructional Leadership. *BU Journal of Graduate Studies in Education*, *8*(2), 42-45.

Buckley, J., Schneider, M., & Shang, Y. (2004). LAUSD school facilities and academic performance. *Washington, DC, National Clearinghouse for Educational Facilities*.

Burns, M. & Lawrie, J. (2016) 7 Recommendations to improve teachers' professional development in fragile context inter-Agency development for Education

Bush, T. (2007). Educational leadership and management: Theory, policy and practice. *South African journal of education*, *27*(3), 391-406.

Bush, T., & Glover, D. (2009). Managing teaching and learning: A concept paper. *MGSLG, Johannesburg*, *4*, 162-168.

Bush, T., Joubert, R., Kiggundu, E., & Van Rooyen, J. (2010). Managing teaching and learning in South African schools. *International Journal of Educational Development*, *30*(2), 162-168.

Carraway, J. H., & Young, T. (2015). Implementation of a districtwide policy to improve principals' instructional leadership: Principals' sensemaking of the skillful observation and coaching laboratory. *Educational Policy*, *29*(1), 230-256.

Chen, C. C. (2018). Facilitation of teachers' professional development through principals' instructional supervision and teachers' knowledge-management behaviors. *Contemporary Pedagogies in Teacher Education and Development, 51*.

Enueme, C. P., & Egwunyenga, E. J. (2008). Principals' instructional leadership roles and effect on teachers' job performance: A case study of secondary schools in Asaba Metropolis, Delta State, Nigeria. *Journal of Social Sciences*, *16*(1), 13-17.

Connelly, L. (2008). Pilot studies. *MedSurg Nursing*, 17(6),411-2.

Connelly, G., & Schooley, M. (2013). National Association of Elementary School Principals. *Leadership Matters: What the Research Says About the Importance of Principal Leadership*.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Dawson, C. (2007). A practical guide to research methods: a user friendly manual for mastering research techniques and projects . UK: Spring Hill House.

Day, C., & Sammons, P. (2016). *Successful School Leadership*. Education Development Trust. Highbridge House, 16-18 Duke Street, Reading Berkshire, England RG1 4RU, United Kingdom.

DeMatthews, D. E. (2014). How to improve curriculum leadership: Integrating leadership theory and management strategies. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *87*(5), 192-196.

DeMink-Carthew, J., Olofson, M. W., LeGeros, L., Netcoh, S., & Hennessey, S. (2017). An analysis of approaches to goal setting in middle grades personalized learning environments. *RMLE Online*, *40*(10), 1-11.

Department of Education (2008) *Managing teaching and learning. A module of advanced certificate: Education School management and leadership*. Pretoria, South Africa: Government Printers

Diantawati, N. A., Fitria, H., & Wahidy, A. (2021, July). The Effect of Academic Supervision and Work Environment on the Performance of Teacher. In *International Conference on Education Universitas PGRI Palembang (INCoEPP 2021)* (1348-1352). Atlantis Press.

Dictionary, O. E. (2010). Oxford english dictionary. *Simpson, Ja & Weiner, Esc*, *3*.

Dorfman, P. W., & House, R. J. (2004). Cultural influences on organizational leadership: Literature review, theoretical rationale, and GLOBE project goals. *Culture, leadership, and organizations: The GLOBE study of*, *62*, 51-73.

Dotson, R. (2016). Goal setting to increase student academic performance. *Journal of School Administration Research and Development*, *1*(1), 45-46.

Edgerton, E., McKechnie, J., & McEwen, S. (2011). Students' perceptions of their school environments and the relationship with educational outcomes. *Educational & Child Psychology*, *28*(1), 33-45.

Frankeal, J., Wallen, N. and Hyun, H. (2012) *How to design and evaluate research in Education (8th ed)* USA: McGraw Hill companies.

Fultz, D. M. (2011). Principal influence on school climate: A networked leadership approach (Yayımlanmamış doktora tezi). *The Ohio State University, USA*.

Gall, M. D., Gall, J. P., & Borg, W. R. (2007). Educational research: an introduction (8. utg.). *AE Burvikovs, Red.) USA: Pearson*.

Groves, R., & Welsh, B. (2010). The high school experience: What students say. *Issues in Educational Research*, *20*(2), 87-104.

Gumus, S., Bulut, O., & Bellibas, M. S. (2013). The relationship between principal leadership and teacher collaboration in Turkish primary schools: a multilevel analysis. *Education Research and Perspectives*, *40*(2013), 1-29.

Hallinger, P., & Murphy, J. (1986). Instructional Leadership in Effective Schools.

Harvey, J., & Holland, H. (2011). The school principal as leader: Guiding schools to better teaching and learning. *Wallace Foundation*.

Hoque, K. E., Bt Kenayathulla, H. B., D/O Subramaniam, M. V., & Islam, R. (2020). Relationships between supervision and teachers' performance and attitude in secondary schools in Malaysia. *Sage Open, 10*(2), 2158244020925501.

Holmberg, S. (2014). Principals' goal-setting and actions while managing: An explorative study of locally-created goals and principals' actions while managing their schools.

Al Hosani, H. M. A. (2015). Principals'instructional leadership practices and their relationship to teachers'instructional practices in Sharjah schools.

Hull, J. (2012). The principal perspective: Full report. *Center for Public Education*.

Moonsammy-Koopasammy, L. I. (2013). *The role of principals as instructional leaders: Implications for effective teaching and learning*. University of Johannesburg (South Africa).

Jagero, N. (2014). Input-output relationship and the quality of education in day secondary schools in Kenya. *International Journal of Community and Corporative Studies, 1*(2), 42-50.

Jawas, U. (2014). *Instructional leadership in Indonesian school reform: local perceptions and practices* (Doctoral dissertation, University of Canberra).

Johnson, B. & Christensen, L. (2017) *Educational Research: Quantitative, Qualitative and Mixed Approaches* (6th ed) USA: Sage Publication.

Johnston, W. R., & Tsai, T. (2018). *The prevalence of collaboration among American teachers: National findings from the American Teacher Panel*. RAND.

Kaai, P. L. (2016). *Understanding and Improving Instructional Leadership Practices in Primary Schools in Karatu District, Arusha, Tanzania* (Doctoral dissertation, The Open University of Tanzania).

Kabeta, R. M., Manchishi, P. C., & Akakandelwa, A. (2015). Instructional leadership and its effect on the teaching and learning process: The case of head teachers in

selected Basic Schools in the Central Province of Zambia. *International Journal of Science and Research*, *4*(4), 1876-1884.

Kisilu, D. K., & Tromp, D. L. (2006). Proposal and thesis writing: An introduction. *Nairobi: Pauline's Publications Africa*.

Korir, D. and Kipkemboi, F. (2014) Impact of School Environment and Peer Influence of Student Academic Performance in Vihiga County, Kenya. *International Journal of Humanities and Social Science*. *4*(5),240-251.

Kosgei, A., Mise, J. K., Odera, O., & Ayugi, M. E. (2013). Influence of teacher characteristics on students' academic achievement among secondary schools. *Journal of Education and practice*, *4*(3), 76-82.

Lai, E., & Cheung, D. (2013). Implementing a new senior secondary curriculum in Hong Kong: Instructional leadership practices and qualities of school principals. *School Leadership & Management*, *33*(4), 322-353.

Leithwood, K. A. (Ed.). (2000). *Understanding schools as intelligent systems*. Jai Press.

Lee, M., Walker, A. and Chui, Y.(2012) Contrasting effects of instructional leadership practices on students learning in a high accountability context. *Journal of Educational Administration* 50(5) 586-611.

Kim, T., & Lee, Y. (2020). Principal instructional leadership for teacher participation in professional development: evidence from Japan, Singapore, and South Korea. *Asia Pacific Education Review*, *21*(2), 261-278.

Leithwood, K.,Louis, K., Anderson, S. and Wahstrom, K.*(2004) How leadership Influences students' learning* Ontario, Cananda: Ontario institute for studies in Education.

Leithwood, K., Seashore, K., Anderson, S. & Walstrom, K. (2010) *Investigating the Links to Improved Student Learning. Final Report of Research Findings* University of Minnesota: CAREI.

Lineburg, P. N. (2010). *The Influence of the Instructional Leadership of Principals on Change in Teachers' Instructional Practices* (Doctoral dissertation, Virginia Tech).

Marin, P., & Brown, B. (2008). The School Environment and Adolescent Well-being: Beyond Academics. *JAMA*, *295*(13), 1549-1555.

Mcmillan, J. and Schumecher, S. (2001) *Research in Education-A Conceptual Introduction* (5th ed). Addison Wesley (incl): Longman.

Mafuwane, B. M. (2011). *The contribution of Instructional Leadership to Learner Performance* (Doctoral dissertation, University of Pretoria).

Malik, R. H., & Rizvi, A. A. (2018). Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level. *Bulletin of Education and Research*, *40*(2), 207-218.

Manaseh, A. M. (2016). Instructional leadership: The role of heads of schools in managing the instructional programme. *International Journal of Educational Leadership and Management*, *4*(1) 30-47.

Martin, A. J., & Steinbeck, K. (2017). The Role of Puberty in Students' Academic Motivation and Achievement. *Learning and Individual Differences*, *53*, 37-46.

Marin, P., & Brown, B. (2008). The School Environment and Adolescent Well-being: Beyond Academics. *JAMA*, *295*(13), 1549-1555.

Masuku, S. (2011). *The Instructional Leadership Role of the High School Head in Creating a Culture of Teaching and Learning in Zimbabwe* (Doctoral dissertation).

Memon, M. A., Ting, H., Cheah, J. H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: review and recommendations. *Journal of Applied Structural Equation Modelling*, *4*(2), 1-20.

Mestry, R. (2017). Principals' Perspectives and Experiences of their Instructional Leadership Functions to Enhance Learner Achievement in Public Schools. *Journal of Education (University of KwaZulu-Natal)*, (69), 257-280.

Miller, Robert J., Yvonne L. Goddard, Roger Goddard, Ross Larsen, and Robin Jacob. "Instructional Leadership: A Pathway to Teacher Collaboration and Student Achievement." *Online Submission* (2010).

Ministry of Education (1988) *Sessional Paper N0. 1 of 2003 on A Policy Framework for Education Training and Research*, Nairobi: Government Printers.

Ministry of Education (2012). A Policy Framework for Education *Aligning education and training to the constitution of Kenya 2010 and vision 2030 and beyond.* Nairobi: Government printer.

Ministry of Education (2019) *Sessional paper no 1 on policy framework for Reforming Education and Training for Sustainable Development in Kenya.* Nairobi:Government printer.

Mizell, H. (2010). *Why Professional Development Matters*. Learning Forward. 504 South Locust Street, Oxford, OH 45056.

Mucai, E.. (2013). Availability and utilization of educational resources in influencing students' performance in secondary schools in Mbeere South, Embu County, Kenya. *Unpublished Masters Degree thesis*.

Mugure, N. S. (2012). Impact of resource utilization in education as perceived by teachers in secondary schools in Mathioya District, Muranga County, Kenya. *Kenyatta University. Kenya*.

Mutuku, M. P. (2018). Influence of instructional leadership practices on academic performance in public secondary schools in Machakos County, Kenya. *Unpublished doctorate dissertation. Kenyatta University*.

Ndaita, J. S. (2015). *Influence of Principals' Instructional Quality Assurance Role on Students' Academic Performance in Kitui West District, Kenya* (Doctoral dissertation).

Nemoto, T., & Beglar, D. (2014). Likert-scale questionnaires. In *JALT 2013 conference proceedings* (pp. 1-8). Tokyo: Jalt.

Nettles, S. M., & Herrington, C. (2007). Revisiting the Importance of the Direct Effects of School Leadership on Student Achievement: The Implications for School Improvement Policy. *Peabody Journal of Education*, *82*(4), 724-736.

Neuman, W., (2007). *Basics of social research: Qualitative and quantitative approaches* (2nd ed.). Boston, MA: Allyn and Bacon.

Novlette, L., (2015). *The influence of school leadership practices on classroom management, school environment, and academic underperformance* (Doctoral dissertation, Walden University).

Nyamongo, D. N., Sang, A., Nyaoga, R. B., & Matoke, Y. K. (2014). Relationship between School Based Factors and Students' Performance in Kenya Certificate of Secondary Examination, Masaba North District, Kenya. *International Journal of Education and Research*, *2*(1), 2014.

Nwachukwu, P. O., & Yaba, L. (2014). School Environment and Teachers' Performances in Economics in Senior Secondary School Education in Oshilimi South Local Government Area of Delta State. *Journal of Economics and Sustainable Development 5(22)148-152.*

Nzabonimpa (2011). Influence of Head Teachers' General and Instructional Supervisory Practices on Teachers' Work Performance in Secondary Schools in Entebbe Municipality, Wakiso District, Uganda. *Online Submission*.

O'Brien, K. A., & Bowles, T. V. (2013). The importance of belonging for adolescents in secondary school settings. *The European Journal of Social & Behavioural Sciences*.

Oduor, A. *(2015)* Form One Selection. *Standard Digital*.

Okongo, R. B., Ngao, G., Rop, N. K., & Wesonga, J. N. (2015). Effect of Availability of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-School Centers in Nyamira North Sub-County, Nyamira County, Kenya.*Journal of Education and practice* 6(35) 132-141.

Olubu, M. (2014) Effects of laboratory learning environment on student learning outcomes in secondary school chemistry. *International journal of arts and sciences.* 8(2)507-525.

OECD, T. Learning International Survey TALIS,(2009). *Creating effective teaching Learning Environments: First Results from TALIS. Educational International analysis. Organisation for Economic Co-operation Development*.

Pinto, D. A. (2014). Effective principal leadership behavior: The student perspective.D.ED Dissertaion San Barnadino university.

Purinton, T. E. D. (2013). Is instructional leadership possible? What leadership in other knowledge professions tells us about contemporary constructs of school leadership. *International Journal of Leadership in Education*, *16*(3), 279-300.

Poulos, J., Culberston, N., Piazza, P., & d'Entremont, C. (2014). Making space: The value of teacher collaboration. *The Education Digest*, *80*(2), 28.

Ravitch, D. (2010). *Edspeak: A glossary of education terms, phrases, buzzwords, and jargon*. ASCD.

Republic of Kenya (2015) Basic Education Act 13. *Kenya Gazette Supplement* ,37, 421-436.

Republic of Kenya (2015) *Basic Education Programme Rationale and Approach (2013-2018)* Nairobi: Government Printer.

Rudd, P., Reed, F., & Smith, P. (2008). The effects of the school environment on young people's attitudes towards education and learning: Summary report.

Saitis, C. (2008). Educational Policy & Administration. *Athens: National & Kapodistrian University of Athens and School of Pedagogical and Technological Education (in Greek)*.

Saka, O. A. (2021). Can teacher collaboration improve students' academic achievement in junior secondary mathematics?. *Asian Journal of University Education*, *17*(1), 33-46.

Samoei J. (2015). Instructional supervisory role of principals and its'influence on students academic achievement in public secondary schools in Nandi north district Nandi county Kenya (Doctoral dissertation).

Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*. Pearson education.

Schap, E. (2005). The Role of Supportive School Environment in Promoting Success, an Article from Development Studies Centre (DSC). *Developing Safe and Healthy Kids, Published in Getting Result*.

Sciullo, J. R. (2016). *The role of the scool leader in collaboration between regular and special education teachers*. Old Dominion University.

Schleifer, D., Rinehart, C., & Yanisch, T. (2017). Teacher Collaboration in Perspective: AGuide to Research. *Public Agenda*.

Sekaran, U., & Bougie, R. (2009). Research Methods for Business (PDFDrive. com)(V). Chichester.

Sinay, E. (2016). *Research series on school effectiveness and school improvement: Local and international trends in school effectiveness and school improvement*. Toronto District School Board.

Smith, C., & Amushigamo, A. (2016). The perceived influence of school leadership on learner behaviour in a Namibian secondary school. *Educational Management Administration & Leadership*, *44*(4), 650-667.

Stronge, J. H. (2008). In N. Catano & HB Richard. *Qualities of effective principals*, 157- 252.

Sunday, A. F., & Olufunmilayo, O. A. (2008). Impact of environmental management on students'quality output in Nigerian secondary schools. *Journal of International Social Research*, *1*(5) 752-762.

Sun, J., & Leithwood, K. (2015). Leadership effects on student learning mediated by teacher emotions. Societies, 5 (3), 566-582.

Okeke, S. O., & Okoye, N. E. (2013). Effective resource utilization: A better approach to teaching and learning of Physics. *Academic Journal of interdisciplinary studies*, *2*(6), 35-40.

Teachers Service commission (2015) *Code of Regulation for teachers*. Retrieved from www.tsc.go.ke.

Tomno, C. S. (2014). *Teachers' perception of principals' instructional leadership practices and their influence on students' academic achievement in public secondary schools* (Doctoral dissertation, Moi University).

Usaini, M. I., Abubakar, N. B., & Bichi, A. A. (2015). Influence of school environment on academic performance of secondary school students in Kuala Terengganu, Malaysia. *The American Journal of Innovative Research and Applied Sciences*, *1*(6), 203-209.

Usman, Y. D. (2015). The Impact of Instructional Supervision on Academic Performance of Secondary School Students in Nasarawa State, Nigeria. *Journal of Education and Practice*, *6*(10), 160-167.

Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of educational administration*.

Vukovic,R.(2017) Importance of the school staffroom.

Wanzare, Z. (2012). Instructional supervision in public secondary schools in Kenya. *Educational Management Administration & Leadership*, *40*(2), 188-216.

Weber, J. R. (1987). Instructional Leadership: A Composite Working Model. Synthesis of the Literature.

Wilson, N. (2009). *Impact of extracurricular activities on students*. A master of science thesis in school counselling. University of Wisconsin- stout. .

Yukl, G. (2002) *Leadership in Organization*. Upper Saddle River, New Jersey: Prentice Hall.

Yukl, G. (2006) *Leadership in Organization* (6th ed). Upper Saddle River, New Jersey: Prentice Hall.

Zammit, K., Sinclair, C., Cole, B., Singh, M., Costley, D., Brown, L., & Rushton, K. (2007). Teaching and leading for quality Australian schools. *Australian Institute for Teaching and School Leadership, University of Western Sydney*.

Zarrow, J. (2019). 5Strategies for better teacher professional development. *Режим доступа:https://www.teachthought.com/pedagogy/5-strategies-better-teacher-professional-development/[circulation date: 14.08. 2018]*.

Zepeda, S. J. (2014). *The principal as instructional leader: A handbook for supervisors*. Routledge.

APPENDICES

APPENDIX 1: QUESTIONNAIRE FOR TEACHERS
RONGO UNIVERSITY

The Influence of Principals' Instructional Leadership practices on academic Environment in Public Day Secondary Schools in Kisii Central Sub-County.

Introduction

I am a student in the above-named institution. In partial fulfilment for the award of a doctorate degree i am expected to conduct research and write a report. My study focuses on The Influence of Principals' Instructional Leadership practices on academic Environment in Public Day Secondary Schools in Kisii Central Sub-County. Your identity will be kept confidential during and after the study. Do not write your name or the name of your school on the questionnaire. Kindly respond to the questionnaire with ultimate honesty in order to facilitate the study. Thank you for taking time to support this study.

INSTRUCTION

Place a tick (√) in the bracket after the most appropriate responses and where explanation is required, use the spaces provided.

SECTION A: BIOGRAPHIC INFORMATION

1. Indicate your gender Male ( ) Female ( )

2. Indicate your educational qualification Diploma in education ( ) Degree in education( ) Masters degree in education ( )

Any other _____

3. Indicate your teaching experience in terms of years Below 1 ( ) 1-5 ( )

6-10 ( ) Above Ten ( )

4. Indicate the period spent in the current school in terms of years Below 1 ( )

1-5 ( ) 6-10 ( ) Above Ten ( )

SECTION B: SETTING, COMMUNICATING AND SUSTAINING SCHOOL ANNUAL GOALS

5. Does your head teacher set annual academic goals? Yes ( ) No ( )

If your answer to question (6) is yes respond to the other questions in this section else go to section C

6. What is your school academic goal this year (in terms of mean grade or mean score)?

_____

7. How are the school annual academic goals developed? Indicate by ticking as appropriate

	Yes	No
Principal develops goals alone	( )	( )
Goals are set at the departmental level	( )	( )
Goals are developed at the zonal level	( )	( )
Goals are given by the county quality assurance officer	( )	( )
Principal involves teachers and learners in goal setting	( )	( )

8. How does the set goal influence your teaching?

	Yes	No
Influence syllabus coverage	( )	( )
Influences feedback given to students	( )	( )
Influences classroom management	( )	( )
Influences the number of evaluation tests administered to students	( )	( )
Influences the choice of methodology used in teaching	( )	( )

9. On a day to day basis what activities does your principal engage in to sustain the school annual academic goal?

	Yes	No
Refers to school goal during assembly and meeting with students	( )	( )
Monitors progress of activities directed towards attainment of school goal such as syllabus coverage	( )	( )
Ensures teaching takes place	( )	( )
Ensures that learners are academically engaged	( )	( )

10. How would you rate your principal in regards to sustaining the school goal? Very effective ( ) Effective ( ) don't know ( ) Ineffective ( ) Very ineffective ( )

Explain reason for your rating

_____

SECTION C: MONITORING INSTRUCTION

11 a) Does your principal monitor teaching and learning? Yes ( ) No ( )

b) If yes does it influence your teaching Yes ( ) No ( )

c) If yes what aspect of teaching does it influence? Yes No

My class attendance ( ) ( )

Syllabus coverage ( ) ( )

Teaching methodology adopted ( ) ( )

Issuance of home work to learners ( ) ( )

Provision of feedback to learners ( ) ( )

Preparation and use of professional documents ( ) ( )

12a) Indicate how frequently the following professional documents are checked

Document	Frequency				
	Daily	Weekly	Monthly	Termly	Never
Lesson plan					
Schemes of work					
Records of work covered					
Class registers					
Tests					

b) Who checks them? Principal ( )Deputy Head teacher ( )Head of department ( )

13) Does your principal conduct classroom observation? Yes ( )No ( )

If yes, how often?

Daily () Weekly ( ) Bi Weekly ( ) Termly ( ) Never ( )

14a) Does your principal give feedback after classroom observation? Yes ( ) No ( )

b) If yes indicate the timing of the feedback. Immediately ( ) After some time ( )

Never ( )

c) How useful is the feedback in relation to instruction?

Very Useful ( ) Useful ( ) Don't know ( ) Not useful ( ) Very un useful ( )

Elaborate your response to 14c above `

_____

15) Other than the principal, who else participates in classroom observation?

H.O.D ( ) Deputy Principal ( )Other teachers ( )

16) How would you rate your principal in regards to monitoring instruction?

Very effective ( )Effective ( ) [ ] Don't know ( )Ineffective ( )Very ineffective ( )

SECTION D: PROMOTION OF PROFESSIONAL DEVELOPMENT

17a) Does your principal support teachers' professional development? Yes ( ) No ( )

b) If so what efforts does the principal make to promote teachers' professional development?

	Yes	No
Gives information on upcoming trainings	( )	( )
Gives monetary facilitation to teachers	( )	( )
Allows teachers time out	( )	( )

18a) Have you benefitted from any professional development programme in the last two years?

Yes ( ) No ( )

b) If yes who organised it?

Principal ( ) Head of department ( )Ministry of Education ( )

c)What was it about? _____

19) How has this influenced your teaching?

	Yes	No
i. Enhanced my pedagogical skills	( )	( )
ii. Enhanced mastery of content	( )	( )
iii. Enhanced class management	( )	( )
iv. Changed my attitude towards work	( )	( )

20) Do principals' efforts to influence your professional growth influence how you feel about the school Yes ( ) No ( ) If yes explain how

_____

SECTION E: PROMOTION OF COLLABORATION AMONG TEACHERS

21a) Does your principal support teachers' collaboration Yes ( ) No ( )

b) Do you work together with other teachers in your school on activities related to teaching? Yes ( ) No ( )

c) If yes to (b) above in which activities do you work together?

	Yes	No
Planning for instruction	( )	( )
Teaching	( )	( )
Marking tests and examinations	( )	( )
Preparation of teaching materials and resources	( )	( )
Preparation of tests and examinations	( )	( )

22) How has working together with other teachers influenced your teaching?

	Yes	No
Enhanced mastery of content	( )	( )
Sharpened my pedagogical skills	( )	( )
Enhanced my creativity in use and development of teaching	( )	( )
Enlightened me on how to address learners challenges	( )	( )

23) Do principal's efforts to promote collaboration amongst teachers influence your perception of the school? Yes ( ) No ( )

If yes explain how` _____

SECTION F: INSTRUCTIONAL LEADERSHIP INFLUENCE ON PROVISION AND UTILIZATION OF RESOURCES

24) How would you rate the adequacy of the following resources in your school?'

Resource	Adequate	In adequate
Staff room		
Toilets		
Library		
Classes		
Laboratory apparatus and reagents		
Teachers' guides		
Text books		
Departmental offices		
Chalks		

25) What is the book: student ratio in your teaching subject?

_____

26a) Does principal's influence on utilization of resources influence your teaching

Yes ( ) No ( )

b) If yes indicate how (Tick as appropriate) Yes No

Influences class work given to learners ( ) ( )

Marking books in class ( ) ( )

Influence homework given to learners ( ) ( )

Teaching of certain aspects of my teaching subject ( ) ( )

27) Does your principal encourage creativity in acquisition and utilization of resources?

Yes ( ) No ( ).

If yes explain how _____

SECTION G: SCHOOL ENVIRONMENT

28) Please indicate your level of agreement with the following statements on a scale of 1-5 where; 1= Strongly Disagree, 2=Disagree, 3=Neither agree nor disagree,4=Agree and 5= Strongly Agree.

Statement	1	2	3	4	5
The school environment is conducive for teaching and learning					
The physical space in the school allows collaboration with other teachers					
Classroom arrangement allows the teacher to work effectively with learners					
Resources provided in the school are adequate					
My principal ensures that the school environment is conducive for teachers to plan and teach their lesson					
School principal and teachers in my school have supportive working relationship					
The environment in my school is inviting					
I am happy working in my current school					
I like the physical appearance of my school					
I like my school environment					

I cannot leave this school for another one					

29) During your stay in this school have you realised any efforts by the principal to enhance the school environment? Yes ( ) No ( ).

If yes indicate some of the efforts (Tick as appropriate)

	Yes	No
Improved physical infrastructure	( )	( )
Improved general outlook of the school	( )	( )
Enhances relationship with teachers and learners by building trust and respect	( )	( )
Promoted students discipline	( )	( )
Enhanced instructional resources	( )	( )

30) Which aspect(s) of the school environment would you like to be improved?

_____

_____

_____

APPENDIX 2: LEARNERS' QUESTIONNAIRE
RONGO UNIVERSITY

Introduction

Influence of Principals' Instructional Leadership on academic Environment in Public Day Secondary Schools in Kisii Central Sub-County.

I am a student in the above named institution. In partial fulfilment for the award of a doctorate degree i am expected to conduct research and write a report. My study focuses on The Influence of Principals' Instructional Leadership on academic Environment in Public Day Secondary Schools in Kisii Central Sub- County. *Your identity will be kept confidential during and after the study. Do not write your name or the name of your school on the questionnaire. Kindly respond to the questionnaire with ultimate honesty in order to facilitate the study.*

Thank you for taking time to support this study.

LEARNERS' QUESTIONNAIRE

INSTRUCTION

Place a tick (√) in the bracket after the most appropriate responses and where explanation is required, use the spaces provided

SECTION A: PRINCIPALS' INSTRUCTIONAL LEADERSHIP PRACTICES

1.Does your principal set goals for your school? Yes ( ) No ( )

b. If yes, what is the school goal for this year?

_____

2. On your part what are you doing to ensure attainment of this year's goal

_____

3.Indicate how much you agree on the following statements on a scale of 1-5 where; 1= Strongly Disagree, 2= Disagree, 3=Neither agree nor disagree, 4= Agree and 5= Strongly Agree Indicate your answer to the following statements by ticking in the appropriate column.

Statement	1	2	3	4	5
Principal visits our class during classes					
Our principal is present in school most of the time					
The presence of my principal influences our learning					
Principal encourages us to attend school regularly					
Our principal encourage us to use available resources well					
Principal rewards good performance					

4.What aspect of the school would you like to be improved? (Tick as appropriate)

Classes ( ) Library ( )Toilets ( ) Laboratories ( )Games ( ) Lunch ( ) Clubs ( )

Homework ( ) Number of text books ( )Number of teachers ( ) Any other (specify) ( )

SECTION C: SCHOOL ENVIRONMENT

5. Indicate how much you agree on the following statements on a scale of 1-5 where; 1= Strongly Disagree, 2= Disagree, 3= Neither agree nor disagree,4= Agree and 5= Strongly Agree.

Statement	1	2	3	4	5
School environment is friendly					
Teachers in this school are encouraging					
I find it easy to discuss academic matters with my teachers					
I enjoy learning in this school					
Most of the materials required for learning are available in my school					
I enjoy school most of the time					
I am proud of my school					
I feel that i belong to this school					
Students in my school are well behaved					
My school principal is mostly in school					
Our principal encourages us to work hard in our studies					
School physical appearance is attractive					

APPENDIX 3: INTERVIEW SCHEDULE FOR PRINCIPALS

1. Highest Academic qualification
2. Years of teaching experience
3. 3.Number of years in the current station as the school principal?
4. How do you set the school annual goal?
5. What considerations do you make in goal setting?
6. On a day today basis how do you ensure the attainment of the school goals?
7. How do you inspire teachers to work towards set school objectives?
8. How do you influence your learner to work towards set school objectives?
9. How do you ensure that available teaching-learning resources are utilised effectively?
10. How do you ensure that teaching-learning time is utilised effectively?
11. What strategies have you put in place to minimize wastage of teaching learning time?
12. How do you monitor instruction in your school?
13. How do you promote professional growth among your teacher?
14. What are some of the areas of teachers' professional development you have worked on with your teachers?
15. How do you promote collaboration among teachers?
16. What strategies have you put in place to enhance the academic environment in your school?
17. What challenges do you face in providing a conducive environment for teachers and learners in you school?

APPENDIX 4: OBSERVATION SCHEDULE

School environment

This will be rated on a three- point scale where one (1) stands for available, very appropriate or very adequate two, (2) Not available, appropriate or adequate and three (3) not appropriate and inadequate.

Aspect	Available		Appropriateness			Adequacy			Comment
	1	2	1	2	3	1	2	3	
Perimeter fence									
Classrooms									
Staff room									
Departmental offices									
Furniture									
Water Points									
Toilets									
Security personnel at the gate									
Check in check out systems									
Class room arrangement									
Desks									
School annual goal displayed in critical areas in the school									
Library									
Laboratories									
Books									

Any other observation not indicated in the check list.

_____

_____

APPENDIX 5: DOCUMENT ANALYSIS GUIDE

Document	Statement	Yes	No	Comment
Class register	Class register available			
	Class register updated regularly			
	Learners attendance satisfactorily			
Schemes of work	Schemes of work available			
	Schemes of work updated regularly			
	Remark column indicate how lesson was covered			
	Schemes of work endorsed by the principal or head of department			
Record of work covered	Record of work covered available			
	Record of work updated regularly			
Lesson plans	Lesson plan available			
	Remarks provide feedback on how the Lessons are covered			
Tests	Record of tests administered available			
	Tests administered regularly			
	Test administered in all subjects			
Note books	Students attempt assignment for different subjects			
	Books are checked by the teacher			

APPENDIX 6: NACOSTI RESEARCH PERMIT

THIS IS TO CERTIFY THAT:
MS. MARTHA NDUTA KIARIE
of RONGO UNIVERSITY, 1835-40200
KISII,has been permitted to conduct
research in *Kisii County*

Permit No : NACOSTI/P/19/49199/27545
Date Of Issue : 14th January,2019
Fee Recieved :Ksh 2000

on the topic: *INFLUENCE OF PRINCIPAL INSTRUCTIONAL LEADERSHIP PRACTICES ON ACADEMIC ENVIRONMENT IN PUBLIC DAY SECONDARY SCHOOLS IN KISII CENTRAL SUB-COUNTY.*

for the period ending:
14th January,2020

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

APPENDIX 7: MAP SHOWING KISII CENTRAL SUB- COUNTY IN KISII COUNTY