AN ASSESSMENT OF THE USE OF INNOVATIVE STRATEGIES ON ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS IN KENYA

A SURVEY OF SECONDARY SCHOOLS IN NAKURU TOWN EAST SUB-COUNTY

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Abstract

There are a number of innovative strategies that secondary schools should employ in order to realize better performance for their students. The main objective of the study was to analyze the use of innovative strategies on academic performance in secondary schools. Specifically, the study examined how ICT and transformational leadership influence academic performance. The study was carried out in secondary schools in Nakuru East sub-county, Kenya. Descriptive research design was used. The target population comprised of 283 teachers working with the aforementioned schools. A sample of 74 respondents was selected using simple random sampling method. A set of structured questionnaires were used to collect data from the sampled respondents. The SPSS software was used to analyze the data. Data analysis was in form of descriptive and inferential statistics. The study established that transformative leadership influenced academic performance positively. However, ICT was found to negate the students' academic performance. The study concluded that ICT negated the academic performance of students possibly due to its inappropriate use. The study recommends that it is important to have the requisite ICT facilities; yet all stakeholders should be taken through the importance of such facilities and how they can employ the same to enhance the students' academic

performance. It is further recommended that the school heads should avoid remaining rooted to conservative ways of managing public secondary schools; rather they should be alive to the fact that changes are inevitable even in the academic world.

Keywords: Academic performance, ICT, innovative strategies, public secondary schools, transformational leadership

INTRODUCTION

Innovative strategies are part of strategies adopted to enhance academic performance. Innovation involves acting on the creative ideas to make some specific and tangible difference in the domain in which the innovation occurs (Davila et al., 2006). Innovation is viewed as the successful implementation of creative ideas within an organization. Strategy is the direction and scope of an organization over the long term which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholders' expectations (Oke & Goffin, 2001). There are several innovative strategies of boosting academic performance of students in secondary schools.

Performance in secondary schools involves appraisal of prescribed indicators or standards of effectiveness, efficiency, and environmental accountability. Performance also refers to the metrics regarding how a certain request is handled, or the act of doing something effectively. Indeed, Kormla (2012) noted that the leadership practices of principals influenced students' academic performance. Kenya recognizes that the education and training of all Kenyans is fundamental to the success of the Vision 2030. Education equips citizens with understanding and knowledge that enables them to make informed choices about their lives and those facing Kenyan society. The education sector will, therefore, provide the skills that will be required to steer Kenyans to the economic and social goals of Vision 2030.

The Kenya's education system is dominated by examination-oriented teaching, where passing examinations is the only benchmark for performance. There is no internal system of monitoring learning achievements at other levels within the education cycle. It is generally agreed that the most important manifestations of quality education have to do with literacy, cognitive abilities, performance and progression to higher levels of learning. There is reliance on scores and transition rates as core measures of achievement. In Kenya, examinations are generally accepted and acknowledged as valid measures of academic achievement according to Maiyo (2009).

Statement of the Problem

The essence of enrolling with any learning institution is to gain knowledge, skills, and competence. This is mainly reflected by students' academic performance. The metric of this performance especially in the Kenya's context has all along been examinations (Maiyo, 2009). Every learner has their unique talent when it comes to acquiring knowledge, skills and competence. The uniqueness is further exemplified by the available resources, the students' socio-economic background, qualifications and teachers' competence and the students' ability to grasp matters academic are some crucial factors on which academic performance is pegged. There are a number of innovative strategies that have been devised by education institutions in many countries in the world (Hung-cheong, 2006). It is noteworthy that in Kenya, the education cabinet secretary has abolished the holiday tuition at both primary and secondary schools' level.

However, the exact role of the aforementioned strategies is still unclear. Failure to understand the implication of these strategies may lead to school's stakeholders concentrating their energies on strategies whose effect on academic performance is very little, negative or inconsequential. The problem of failing to understand the effect of innovative strategies employed by various academic institutions is bound to be detrimental not only to the students, but also the schools, community and the social economic development of the country. Needless to say, therefore, the present study is bound to present viable solutions to the aforementioned problem by outlining the effects of innovative strategies on students' academic performance.

General Research Objective

To analyze the use of innovative strategies on academic performance in secondary schools in Kenya

Specific Research Objectives

i. To analyze the effect of ICT on academic performance in secondary schools in Nakuru town.
ii. To determine how transformational leadership influences academic performance in secondary schools in Nakuru town.

Research Hypotheses

H_{01}: $\mu_1 = \mu_1$: Use of ICT has no significant effect on academic performance in secondary schools in Nakuru town.

H_{02}: $\mu_2 = \mu_2$: There is no significant relationship between transformational leadership and academic performance in secondary schools in Nakuru town.

THEORETICAL FRAMEWORK

Goal Theory

This theory, according to Francis et al. (2004), postulates that there are two main types of motivation for academic achievement in schools. It is said that students with an ability or performance goal orientation are concerned with proving their competence by getting good grades or performing well compared to other students. On the other hand, students with a task goal orientation are motivated by a desire to increase their knowledge on a subject or by enjoyment from learning the material. Studies have shown that students with a task goal orientation are more likely to engage in challenging tasks, seek help as needed, and adopt useful cognitive strategies, and, possibly most importantly, tend to be happier both with school and with themselves as learners (Anderman & Midgley, 1997).

Subsequent research has suggested, however, that despite its potential implications for middle school policy and curriculum design, a dichotomous perspective of either "task-based" or "performance-based" goals may be too simplistic of a model of adolescent motivation (Dowson & McInerney, 2001). In addition, research has also suggested that task and performance goals are not mutually exclusive. While many experimental studies forced research participants to select one goal orientation or the other, correlational research has found that individuals' endorsement of a task goal orientation is often weakly correlated or uncorrelated with endorsement of a performance goal orientation (Kaplan & Maehr, 2002).

Another academic goal orientation is work avoidance, where students try to minimize the amount of effort they put into tasks (Dowson & McInerney, 2001). Students also have social goals that influence their motivation alongside academic goals. Urdan and Maehr (1995) describe four types of social goals: social approval, social compliance, social solidarity, and social concern. Research involving qualitative methods has suggested that social goal orientations are associated with academic achievement (Kaplan & Maehr, 2002). Most research has, however, focused on only the previous two orientations.

Hwang et al. (2002) interviewed sixty high achieving African-American college students about their reasons for choosing their majors and for studying, and about their educational values. They found that, contrary to the predictions of other researchers, the students did not all hold an intrinsic goal orientation (that is, a task goal orientation). Instead, the students integrated a combination of intrinsic, extrinsic (that is, performance), future, and social goals. For instance, many of the students who were extrinsically motivated wanted to perform well so they would have better career opportunities, and were thus incorporating a future goal orientation.

Attribution Theory

Attribution theory addresses students' sense of competence, specifically how students are affected by their previous performance (Francis et al., 2004). It asserts that students are more influenced by their perceptions of what caused their earlier successes and failures than by the actual experience (Anderman & Midgley, 1997). While it is popularly believed that students who are successful will want to continue being successful, it is suggested that this does not occur if students do not want to continue being successful, and that it does not occur if students do not attribute the success to their own actions and instead attribute it to something else, such as luck. Furthermore, when students fail, they are more likely to be motivated to try harder the next time only if they think that lack of studying or something else in their control led to the failure, rather than attributing the failure to things outside their locus of control.

As motivation has been shown to play a significant role in student achievement, techniques that focus on increasing student motivation should be developed. Maehr and Midgley (1991) suggest that changes need to be made at the school-wide level to increase student motivation rather than only focusing on changes in individual classrooms. They believe that schools should stress task goals rather than simply rewarding performance goals. For instance, groups should be formed on the basis of interest rather than ability and cooperative learning should be emphasized over competition (Anderman & Midgley, 1997). Tucker et al. (2002) think teachers need to be encouraged to show concern for and take an active interest in disaffected students. They should also be fair and consistent while allowing students autonomy, and should help students understand the relevance of classroom work to other aspects of their lives. Furthermore, teachers should be aware of the message they are sending their students about their academic ability (Anderman & Midgley, 1997).

EMPIRICAL REVIEW

Information and Communication Technologies

Research studies states that ICT provide scope for opening new sources of information and empowers an individual for sustained self-learning at their own pace which essentially does not strain them. The effectiveness of the simulation model of teaching through Computer Assisted Instruction (CAI) was looked into by Jeyamani (1991). The scholar attempted to compare the effectiveness of CAI vis-à-vis the traditional method. The study inferred that students taught through CAI tended to perform better than those taught through the traditional method. A study on the effect of education television (ETV) programmes on primary school students indicated that students using this method posted better academic performance than those who did not. Passey et al. (2004) tried to find out the motivational effect of ICT on pupils. This study

investigated the effects of ICT on pupils' motivation. A sample of 17 schools from across England was surveyed. This study found that ICT positively impacted on motivation, particularly in relation to engagement, research, writing and editing and presentation. Pupils reported that the Internet, interactive whiteboards, writing and publishing software, and presentational software were the most useful. There was also evidence that ICT positively influenced attitudes towards school work and school behaviour.

In their study of ICT awareness and academic performance of secondary schools in India, Sandhya and Sunita (2012) observed that ICT is being considered as the technology that has far-reaching consequences in the field of education towards child and learning principles, its effect and efficacy. According to the study findings, there is no significant relationship between the awareness of ICT and perceived impact of ICT on academic performance of secondary school students. A study on the impact of ICT on students' performance in Bangladesh concluded that in a world where technology is playing a crucial role every day. It is essential to encourage and enhance the ICT use in the academic arena in order to stay up-to-date with the rest of the world. The study further opines that there is still a long way to go in inculcating ICT as an important tool for enhancing academic performance. The study by Arinze et al., (2012) sought to investigate ICT application in secondary schools in Nigeria and students' academic performance in social studies. Specifically, they analyzed the ICT availability in schools, skills competence of junior secondary schools students, and the influence of the application of ICT innovations in teaching and learning of social studies in the academic performance of students. The findings showed that the ICT availability in secondary schools is very low and that the students have low competence on the ICT application. Furthermore, it established that ICT raises the interest and performance of students. Essentially, the researchers recommended that the government and private schools' proprietors should equip their schools with the necessary ICT and that ICT should be inculcated in the curriculum.

Makhanu (2010) undertook a study on "Principals' literacy in ICT: towards improving secondary school performance in Kenya". It was found that there was a statistically significant and positive though weak relationship between the ability of a principal to use internet or email and school performance. Given that the effect size was very small, it implied that the ability of a principal to use internet or email plays a negligible role in influencing the school performance. The study concluded that there is a positive correlation between ICT literacy level of a principal and secondary school performance in the Western province of Kenya. The findings, moreover, indicated that the level of ICT access, knowledge and application in school leadership functions play a positive role in influencing school performance. The factors that significantly influence the ICT literacy levels of secondary school principals include gender, age, education level, level of

ICT training and distance of a school from the nearest town. Most principals were also established to have a positive attitude towards ICT. Studies have attempted to compare the effect of ICT on academic performance of students especially on global and regional perspective (Jeyamani, 1991; Passey et al., 2004; Sandhya & Sunita, 2012; Arinze et al., 2012). Yet the in the local perspective studies have hardly delved into the effect of ICT on secondary school students' performance especially from the students' point of view.

Transformational Leadership

Since the late 1990s, most educational leadership academics have studied the dynamics of successful school leadership that leads to effective schooling and high achievement of students. Duke et al. (2006) and Leithwood et al. (2004) have discussed aspects of school leadership skills and methods that enhance the quality of schooling and higher academic achievement of students. They assert that the lack of effective leadership in schools lowers students' achievement since the absence of quality leadership often results in ill-adapted school organization and programs.

They further say that it leads to unstable and difficult staffing, students; negative attitudes to academic work and discipline, an unhealthy school system and climate, and non-cooperation of parents and community. The consequences of failed school leadership are posited to be grave. This purports to explain the significance of shifting the debate on effective schools from unique school effectiveness characteristics and school improvement mechanisms to more pragmatic and integrally, efficient educational leadership traits, which accentuate students' learning and achievement.

It has been argued by different studies that effective schools must have competent principal leadership and committed teaching staff with an instructional focus on fundamental skills (Reeves, 2009). Effective schools anticipate high academic standards for all students in a positive and caring atmosphere, supported by teachers, support staff and local community. The work of Watson et al. (2006) on the academic achievement of Australian Aboriginal students in Mathematics illustrates the benefits of effective integration of exemplary instructional leadership with community cultural values. Studies on effective transformational school leadership bring to the fore certain key practices. These revolve around cherished personal qualities or attributes of the school leader, strong instructional leadership with integration of cultural, community values, individual principal's management and collective leadership skills and the promotion of professional learning communities.

MacNeil and Maclin (2005) describe as an essential function of the successful school leader, the development with and among their collaborators (teachers, students, and parents) a

set of values that unite them. It has been observed that in the Sabota locality of Ghana, some deprived Junior High Schools (JHS) have succeeded in improving the performance of their students. Those schools were headed by principals who demonstrated some degree of effective leadership. It is further posited that there seems to be a relationship between effective rural school leadership and better student academic performance and vice-versa (Agyeman, Baku, & Gbadamosi, 2000; Kadingdi, 2004). It is argued that transforming a school within a short period into a growing, high achieving High School is a consequence of a thorough critical evaluation of the leadership, academic and resourcing situation of the school in concert between the school's head and teaching staff (Kormla, 2012). Day (1999) exemplifies how a school vision and mission, when shared by the principal, teachers, and students can influence the school's transformation.

Ndiritu et al. (2013) studied the implications of transformational leadership skills amongst schools' principals on academic performance. They wanted to establish the effect of transformational leadership on academic performance in selected secondary schools in Kenya. The scholars looked into three transformational characteristics, that is, inspiring a shared vision, challenging the process, and encouraging the heart. Their study findings indicated that there was a weak but not statistically significant correlation between transformational leadership and students' academic performance. Their study recommended that all learners undertaking their teaching training ought to be trained on transformational leadership since they are the ones that take over leadership roles in their career as teachers. Furthermore, practicing school principals were advised that they should learn and practice transformational leadership for effective learning and teaching in their respective schools.

Musera et al. (2012) analyzed the perception of secondary school teachers on the principal's leadership styles in school management in Kenya. Their study results indicated that indeed most of the principals in the sampled schools do practice transformational leadership style. The presence of transformational leadership in Kenya's secondary schools, they argued, was in tandem with the expectations of the 21st century. It is averred that transformational leadership has the potential to influence the subordinates to adopt an organizational vision as that of their leaders. Transformational leadership relates to giving stakeholders an opportunity to lead. It was noted that teachers indicated that the principals do lead through others. As such, therefore, power in the schools practicing transformational leadership is devolved. Duke et al. (2006) and Leithwood et al. (2004) have discussed aspects of school leadership skills and methods that enhance the quality of schooling and higher academic achievement of students. The consequences of failed school leadership are posited to be grave. It has been argued by different studies that effective schools must have competent principal leadership and committed

teaching staff with an instructional focus on fundamental skills (2006; Reeves, 2009). MacNeil and Maclin (2005) describe as an essential function of the successful school leader, the development with and among their collaborators. Ndiritu et al. (2013) studied the implications of transformational leadership skills amongst schools' principals on academic performance. Musera et al. (2012) analyzed the perception of secondary school teachers on the principal's leadership styles in school management in Kenya. However, transformational leadership amongst other stakeholders in the secondary schools has conspicuously been ignored.

Academic Performance

A lot of studies have sought to analyze the factors that influence the academic performance of students. There have been extensive descriptions of specific factors that distinguish effective schools that sustain successful teaching and learning, and also enhance students' academic performance (Reeves, 2009). Harris et al. (2002) further highlights internal school improvement processes or mechanisms of evaluation that help promote effective learning and high academic performance. Some scholars have emphasized that the family background of students is a crucial factor that explains students' performance (Shimada, 2010).

According to Nuttal (1991) and Saunders (1999), students' backgrounds certainly affect the achievement of the concerned students. In the United States (U.S.) Beaulieu et al. (2003) believed that family characteristics have much influence as school characteristics on the academic performance of the students. The scholars further advised that the best way of enabling the students to succeed academically would be to harness the collective responsibility or the social capital of families, schools, and communities towards the integral development of the children. In their study Leithwood et al. (2004) argued that the greatest contribution of principals to the performance of their teachers and students is their ability to create meaningful, collaborative cultures in their schools.

It is emphasized that when principals are able to redesign their school organization through collaborative cultures and structures within and outside the school and build productive relations with parents and the community, they strengthen the effectiveness of the school (Kormla, 2012). Norviewwu-Mortty (2010) had made a similar observation in his study of effective principals in rural Ghana. One of the popular, contemporary efforts to define an educational leadership style that guides the entire school system: principal, teachers, students, support staff, parents and local community, towards active learning and higher performance by students is the professional learning community model (PLC). According to DuFour (2004), the professional learning community is a school which has purposely taken certain concrete strategies to evolve into a skilled learning community. Teachers in a PLC learn not just to teach,

but to ensure that students are learning. Teachers, other staff and students, collaborate intensely in order to learn from and to complement one another, while at the same time being accountable for the actual performance of every student.

All successful, professional learning communities are characterized by three distinct major goals and one commitment. First, they ensure that all students effectively learn. Second, they intensify the culture of collaboration among all players. Third, they ensure that every individual student attains satisfactory results, and finally, by committing to work hard as a team they strive to achieve each of these three goals. Ngugi (2012) studied the effects of extra tuition on academic performance in Kenya. He observed that this tuition has both positive and negative ramifications. On the academic performance, he noted that, it has positive effects. Jeruto and Chemwei (2014) further studied the effects of ban on private tuition in primary schools on academic performance of in private primary schools in Rongai, Kenya. Interestingly, most of the respondents in their study opined that the private tuition ban effected by the Ministry of Education in year 2012, was inconsequential to their academic performance as reflected in year 2013 Kenya Certificate of Primary Education (KCPE) results.

Conceptual Framework

The reviewed studies are conceptualized as outlined in the framework in Figure 1.

Figure 1: Conceptual Framework

Independent Variables   *Intervening Variable*   *Dependent Variable*
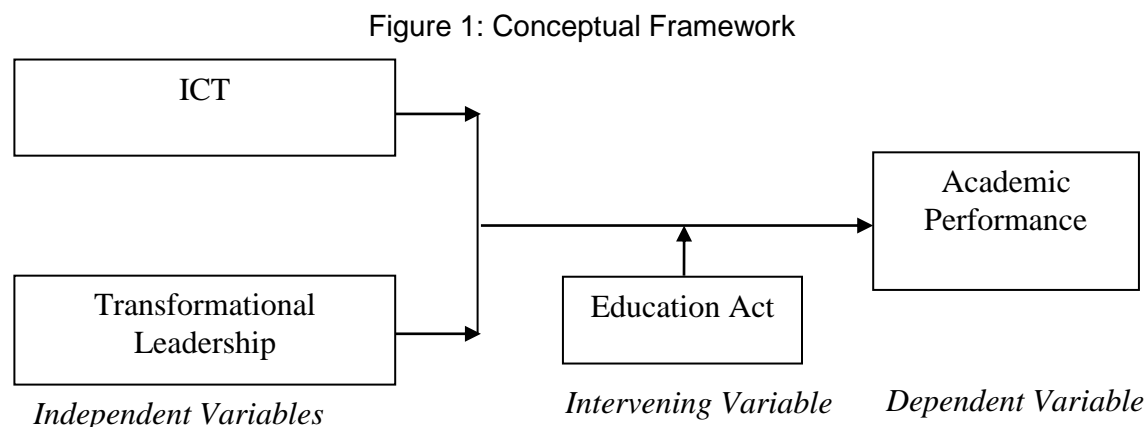
The conceptual framework illustrates how the independent variables (ICT and transformational leadership) influence the dependent variable (academic performance). The framework brings to the fore the assumed relationship in tandem with the study hypotheses. The figure further indicates that a change in any of the independent variables is bound to affect the dependent variable. The relationship between the aforementioned independent variables and the dependent variable is further influenced by the Education Act. In other words how the ICT and

transformation leadership can affect academic performance in secondary schools is within the stipulations of the Education Act.

RESEARCH METHODOLOGY

Research Design

The study employed descriptive research design specifically survey design. This was preferred since it seeks to answer the "what?" question according to Kothari (2008). In the context of this study the major study question was: what is the role of innovative strategies on academic performance in secondary schools?

Target Population

The target population is simply the collection of elements (or respondents) that possess the data being sought by the researcher (Orodho, 2005). It is the population to which the findings of the study are generalized. The target population comprised of the secondary schools teachers working in schools within Nakuru East Sub-County. According to the Ministry of Education employee database, there were 283 teachers in the 11 secondary schools in this sub-county at the time of conducting the study.

Sample Size and Sampling Technique

A sample is a subset of the target population. A good and valid sample should be a representative of the target population (Kitchenham & Pfleeger, 2002). The sample size was calculated using Nasiuma (2000) formula which is illustrated as follows:

$$n = \frac{NC^2}{C^2 + (N-1)e^2}$$

Where: n, N, C, e represent the sample size, the population, the coefficient of variation (0.5), and the precision level (0.05) respectively. The formula was used to calculate the sample as shown

$$n = \frac{283 \times 0.5^2}{0.5^2 + (283-1)\,0.05^2}$$

$$n = 74.08$$

$$n = 74 \text{ respondents}$$

The 74 respondents constituting the sample were selected from the target population using stratified random sampling method. In this case, the secondary schools constituted the strata and the teachers in each secondary school had an equal chance (probability) of being selected to participate in the study.

Research Instrument

The study adopted a structured questionnaire. The questionnaire captured the demographic information of the respondents. More importantly it contained statements and/or questions relative to both independent and dependent variables. The questionnaire was structured in conformity with Likert scale. Likert scale was appropriate since the data collected would enable proper analysis in terms of variability and central tendencies (Singh & Smith, 2006).

Reliability of the Research Instrument

Reliability is said to be the degree to which an instrument can be dependent upon to secure consistent results upon repeated application. The internal consistency reliability of the instrument will be determined by use of the Cronbach alpha. This method is the most widely used. The reliability was tested on individual variable basis. The threshold of the reliability was 0.7 and above ($\alpha \geq 0.7$). The results of the reliability test indicated that all the three variables (ICT, transformational leadership, and academic performance) returned alpha values greater than 0.7 ($\alpha > 0.7$). Therefore, the research instrument was found to be reliable.

Validity of the Research Instrument

It is argued that a research instrument can be reliable but not valid but if it is valid, then it must be reliable. Validity is noted to be the degree to which any measurement approach or instrument succeeds in describing or quantifying what it is designed to measure. In this light, the content validity of the research instrument will be verified. The content validity addresses how well the items developed to operationalize a construct provide an adequate and representative sample of all the items that might measure the construct (variable) of interest. Given that the content validity is not statistically measurable (Kimberlin & Winsterstein, 2008); the researcher sought the expert opinion of the assigned university supervisor.

Data Processing and Analysis

The collected data were coded and analyzed using the Statistical Package for Social Sciences (SPSS) software. The coding was in line with the types (independent and dependent) and values of the variables. The missing values in terms of non-responses were screened. Descriptive analysis was in form of frequencies, percentages, means and standard deviations. The relationship between variables (independent and dependent) was analyzed using the inferential statistics (Pearson's product moment correlation coefficient). The aim of the correlation analysis was not only to establish whether there exists a relationship between study

variables, but also the magnitude and direction of the relationship. The study findings were presented in tables of descriptive and inferential statistics.

EMPIRICAL RESULTS

Descriptive Findings and Discussions

Information and Communications Technologies (ICT)

The study examined the views of teachers and school heads regarding ICT in public secondary schools. Their views are summarized in Table 1.

Table 1: Descriptive Findings for ICT

		n	Min	Max	Mean	Std. Dev
i.	ICT availability in secondary schools is very low	68	1	5	3.99	1.058
ii.	ICT is considered as a technology than can have far-reaching consequences in the field of education	68	2	5	3.87	.809
iii.	Secondary school students have low competence in the ICT application	68	1	5	3.78	1.118
iv.	Conversant with ICT	68	3	5	3.70	.559
v.	ICT provides scope for opening new sources of information that empowers students	68	2	5	3.68	1.029
vi.	Level of ICT access, knowledge and application in school leadership functions play a positive role in influencing school performance	68	1	5	3.50	1.228
vii.	Use of ICT is more effective than traditional methods of teaching	68	1	5	3.37	1.196

The study found out that the respondents generally agreed (mean ≈ 4.00) that ICT availability in secondary schools is very low; ICT is considered as a technology than can have far-reaching consequences in the field of education; secondary school students have low competence in the ICT application and are conversant with ICT; ICT provides scope for opening new sources of information that empowers students, and that level of ICT access, knowledge and application in school leadership functions play a positive role in influencing school performance. Nevertheless, the respondents were indifferent (mean = 3.37; std dev = 1.196) regarding the proposition that use of ICT is more effective than traditional methods of teaching.

Transformational Leadership

The study further outlined the views of the respondents on the theme of transformative leadership in public secondary schools. The results of the pertinent analysis are as outlined in Table 2.

Table 2: Descriptive Findings for Transformational Leadership

		n	Min	Max	Mean	Std. Dev
i.	Lack of effective leadership in schools lowers students' academic achievement	68	4	5	4.72	.452
ii.	Transformational leadership has the potential to influence teachers and subordinate staff to adopt the schools vision of their principal	68	3	5	4.53	.585
iii.	Effective transformation leadership relates to better student academic performance	68	3	5	4.50	.586
iv.	Ineffective leadership results in unstable and difficult staffing. students' negative attitude towards academic work and discipline, etc.	68	2	5	4.47	.837
v.	Schools transformation is influenced by vision and mission when shared by the principal, teachers and students	68	3	5	4.46	.584
vi.	Practicing principals should learn and practice transformational leadership	68	2	5	4.19	.918
vii.	Most of the principals practice transformational leadership	68	3	5	4.16	.803
viii.	Effective schools must have competent principal leadership & committed teaching staff	68	1	5	4.06	1.020
ix.	All learners should be trained on transformational leadership	68	1	5	4.06	1.326
x.	Transformational leadership leads to effective schooling and high students' achievement	68	1	5	3.50	1.228

It was strongly agreed (mean ≈ 5.00; std dev < 1.000) that lack of effective leadership in schools lowers students' academic achievement; transformational leadership has the potential to influence teachers and subordinate staff to adopt the schools vision of their principal; and that effective transformation leadership relates to better student academic performance. More so, it was admitted (mean ≈ 4.00) that ineffective leadership results in unstable and difficult staffing, students' negative attitude towards academic work and indiscipline; schools transformation is influenced by vision and mission when shared by the principal, teachers and students; practicing principals should learn and practice transformational leadership; most of the principals practice transformational leadership; effective schools must have competent principal leadership and committed teaching staff; all learners should be trained on transformational leadership; and that transformational leadership leads to effective schooling and high students' achievement.

Academic Performance

Lastly, the study analyzed the opinions of the teachers and school heads on academic performance in their respective schools. Their views are as shown in Table 3.

Table 3: Descriptive Findings for Academic Performance

		n	Min	Max	Mean	Std. Dev
i.	Teachers, staff and students should collaborate in order to learn from and complement one another	68	4	5	4.60	.493
ii.	The best way of enabling students to succeed academically is to harness decorative responsibility of all stakeholders towards the student's integral development	68	3	5	4.38	.647
iii.	Student's family background is a crucial factor that explains student academic performance	68	3	5	4.37	.644
iv.	Effective schools sustain successive teaching and learning and also enhance students' academic performance	68	3	5	4.37	.571

The respondents strongly concurred (mean = 4.60; std dev < 1.000) that teachers, non-teaching staff and students should collaborate in order to learn from and complement one another. They also agreed (mean = 4.00; std dev < 1.000) that the best way of enabling students to succeed academically is to harness decorative responsibility of all stakeholders towards the student's integral development; student's family background is a crucial factor that explains student academic performance; and that effective schools sustain successive teaching and learning and also enhance students academic performance.

Inferential Findings and Discussions

This part outlines the relationship between the various independent variables (ICT and transformational leadership) and the dependent variable (academic performance). This was achieved by correlating each of the aforesaid independent variables and academic performance.

Relationship between ICT and Academic Performance

The study examined the relationship between information and communication technology and academic performance of students in public secondary schools. The results of the relevant correlation analysis are as shown in Table 4.

Table 4: Correlation between ICT and Academic Performance

		Academic Performance
ICT	Pearson Correlation	-.414**
	Sig. (2-tailed)	.000
	n	68

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

The relationship between ICT and academic performance was established to be negative and moderately strong (r = -0.414; p < 0.01) at 0.01 level of significance. In other words, the more ICT was inculcated in public secondary schools, the poorer the students' academic performance. This could have been occasion by the tendency of the students to use the ICT facilities for other purposes besides academic work that would ultimately negate the amount of time dedicated to learning. The results infer that it would be better for public secondary schools to shun ICT facilities until when the necessary mechanisms are put in place to ensure they are not abused at the expense of academic work. The results also led to the rejection of the first null hypothesis which had implied that ICT had no significant effect on academic performance.

Relationship between Transformational Leadership and Academic Performance

Lastly, the study examined the effect of transformational leadership on academic performance of students in public secondary schools. The results of the correlation analysis are as outlined in Table 5.

Table 5: Relationship between Transformational Leadership and Academic Performance

		Academic Performance
Transformational Leadership	Pearson Correlation	.746**
	Sig. (2-tailed)	.000
	n	68

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

The results indicated that existed a strong, positive and statistically significant relationship between transformational leadership and academic performance (r = 0.746; p < 0.01). Interpretatively, the stronger the transformative leadership in public secondary schools, the greater the chances of students performing better in their academics and the reverse is true. The findings underscored the importance of having transformational leadership in public secondary schools in order to boost the academic performance of students. Needless to say, the fourth null hypothesis was rejected.

Summary

Respondents generally agreed that availability in secondary schools is very low; ICT is considered as a technology than can have far-reaching consequences in the field of education; secondary school students have low competence in the ICT application and are conversant with ICT; ICT provides scope for opening new sources of information that empowers students, and

that level of ICT access, knowledge and application in school leadership functions play a positive role in influencing school performance. Nevertheless, the respondents were indifferent regarding the proposition that use of ICT is more effective than traditional methods of teaching. The relationship between ICT and academic performance was established to be negative and moderately strong (r = -0.414; p < 0.01) at 0.01 level of significance.

It was strongly agreed that lack of effective leadership in schools lowers students' academic achievement; transformational leadership has the potential to influence teachers and subordinate staff to adopt the schools vision of their principal; and that effective transformation leadership relates to better student academic performance. More so, it was admitted that ineffective leadership results in unstable and difficult staffing, students' negative attitude towards academic work and indiscipline; schools transformation is influenced by vision and mission when shared by the principal, teachers and students; practicing principals should learn and practice transformational leadership; most of the principals practice transformational leadership; effective schools must have competent principal leadership and committed teaching staff; all learners should be trained on transformational leadership; and that transformational leadership leads to effective schooling and high students' achievement. The results indicated that existed a strong, positive and statistically significant relationship between transformational leadership and academic performance (r = 0.746; p < 0.01).

It was strongly concurred that teachers, non-teaching staff and students should collaborate in order to learn from and complement one another. It was also agreed that the best way of enabling students to succeed academically is to harness decorative responsibility of all stakeholders towards the student's integral development; student's family background is a crucial factor that explains student academic performance; and that effective schools sustain successive teaching and learning and also enhance students' academic performance.

CONCLUSIONS

The study established that penetration of information and communication technology in public secondary schools was significantly low. In other words, many schools either lacked ICT facilities or had not adopted the concept. Though, the application of ICT could have far-reaching effects on academic performance, the study concluded that students were generally incompetent to its usage. The study further inferred that ICT negated the academic performance of students possibly due its inappropriate use. Transformative leadership was established to play a significant role amongst the school's fraternity. It is able to ensure that teaching and non-teaching staff and also students buy the vision and mission of their school heads. The foregoing was concluded to impact strongly and positively on the academic performance of students in

these schools. The study further deduced that it is very crucial to have competent principals in public secondary schools if at all the academic performance of students were to be enhanced.

RECOMMENDATIONS

The study recommends that it is important to have the requisite ICT facilities; but this should be coupled by ensuring that all stakeholders are taken through the importance of such facilities and how they can employ the same to enhance the students' academic performance. Principals are advised to practice transformative leadership at all costs. In other words, it is recommended that the school heads should avoid remaining rooted to conservative ways of managing public secondary schools; rather they should be alive to the fact that changes are inevitable even in the academic world.

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