

# Quality of Education in Public Secondary Schools in Kenya: Does Teacher Motivation Matter?

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## Abstract

Quality of education has remained at the heart of educational administration over the years. The purpose of this study was to investigate the extent to which teacher motivation levels influence quality of education in public secondary schools in Kenya. The study was guided by the general systems theory. The study used a correlational research design focusing on a target population of 7,325 secondary school principals and 65000 public secondary school teachers employed by the Teachers Service Commission. Based on social economic potential of a region, the study purposefully sampled Kitui, Kisii and Nairobi counties to represent low, medium and high social-economic potential counties in Kenya respectively. Stratified sampling was used to classify schools in these counties into National, Extra County, County and sub County categories. The three counties have a school population of 783 (11 national, 34 extra county, 120 county, and 618 sub county schools) and 8617 teachers giving a sample population of 260 schools and 368 teachers. By stratified proportionate sampling, the study sample consisted of 4 national schools, 11 extra county schools, 40 county schools and 205 sub county schools. The schools were randomly selected in each category to ensure representativeness of all school types. The instruments used to collect data included the teachers questionnaire, principals' questionnaire and observation guide. Reliability coefficient for the questionnaires was 0.7 for teacher questionnaire and 0.72 for principals questionnaire. Data was analyzed using frequencies, percentages, means, T- test, Pearson Product Moment Correlation Coefficients and regression analysis. The findings revealed that there was a positive correlation between teacher motivation and quality of education. From the regression analysis, teacher motivation levels predict KCSE mean score at 6.5. There is need for a structured teacher incentive policy for teachers. The award of incentive should focus on teacher performance and student achievement.

**Keywords:** quality of education, teacher motivation, student achievement

## 1. Introduction

### 1.1 Background of the Study

Secondary education is a crucial tool for generating the opportunities and benefits of social and economic development (World Bank, 2007). It equips students with competencies, knowledge and skills necessary and relevant to the labour market while harnessing their attitude and values to ensure that they become active and productive citizens of their communities (World Bank, 2007; World Bank, 2008). During the World Forum for Education in Incheon, Korea, nations committed with a sense of urgency to a single renewed education agenda of ensuring inclusive and equitable quality education for all (UNESCO, 2015). The forum committed to improving learning outcomes by strengthening education inputs, processes and evaluation of learning outcomes in order to measure progress (UNESCO, 2015). It also committed to empower teachers, motivate and support them within efficient and effective education systems. In spite of these global commitments to provision of quality education, countries world over are at different levels of attaining quality education.

World leaders in provision of quality education have a well-designed incentive system for attracting, developing and retaining teachers (OECD 2011; Singapore Ministry of Education, 2010; Parsons; 2011). Singapore and Finland remunerate teachers a salary competitive to that of engineers, lawyers and medical doctors. The teachers enjoy more perks of rewards and reinforcement based on job performance. Outstanding performers in student achievement get promotions and annual bonuses amounting to three months' salary and individuals or teams excelling in creativity, cost-saving and peer support are also rewarded (OECD, 2011; Singapore Ministry of Education, 2010). Singapore teachers get fully sponsored study leaves and additional money to subscribe to educational journals or buy educational software (OECD, 2011). The teachers are supported by their schools through teacher mentorship programmes, classroom observation and fully paid in-service teacher development courses (Sclafani & Lim, 2008; Singapore Ministry of Education, 2010). Whereas Finnish teachers enjoy high degree of autonomy in their teaching, prestige and recognition from the society; American states have an established Teacher Incentive Fund (TIF) to reward high performing teachers and principals (Humphrey, Gallagher, Yee & Campbell, 2012; OECD, 2011).

In developing countries, most schools are faced with what amounts to teacher crisis (Bennell & Akyeampong, 2007; Sujeewa, 2010). Schools are characterized by poor teacher pay, declining social status for teachers, and poor working conditions (Sujewa, 2010). This leads to high level of teacher absenteeism, sub-standard teaching and loss of teachers to better paying professions (Basil 2013; Sujewa, 2010). A study by

Sujewa on teacher motivation in Sri Lanka found a correlation between Sri Lanka student achievement and motivation of teachers. According to Sujewa, Sri Lankan teachers experience increased work load, poor teacher pay and lack of school moral support. This affects student academic performance hence low quality of education. The findings are consistent with research study conducted by Basil (2013) on teacher motivation in Public secondary schools in Nyamagana District in Tanzania. The current study explored the extent to which teacher motivation levels influence quality of education in public secondary schools in Kenya.

In Kenya, the government introduced subsidized secondary education in 2008 where every student receives Kshs 22,800 annually to cater for teaching and learning resources. The government trains and employs University graduates who specialize in teaching two subjects only for quality purposes (MoEST, 2014). Despite the government efforts to provide quality secondary education, student academic achievement remains low with 88.5 percent of students missing the minimum university entry grade of C+ (KIPPRA, 2013; MoEST, 2014; RoK, 2018). In 2017, only 11.5 percent of candidates who sat for the Kenya Certificate of Secondary Examination (KCSE) attained grade C+ and above, qualifying to join university. This was a drop from 15.6 percent in 2016 (RoK, 2017). The number of students who scored 'A' minus and above declined from 14,754 in 2015, to 4,786 and 2,856 in 2016 and 2017 respectively while the number of students who scored grade 'D' plus and below increased significantly to comprise 65 percent of total KCSE candidature in 2016 and 2017 (KNEC, 2016; RoK, 2017; RoK, 2018). It's on the basis of this scenario that this study was conducted.

## 1.2 Objective

To establish the extent to which teacher motivation levels influence quality of education in public secondary schools in Kenya.

## 1.3 Hypothesis

There is no statistical significant relationship between teacher motivation levels and quality of education in public secondary schools in Kenya.

## 1.4 Literature Review

Teacher motivation is currently viewed as the most important variable on learner motivation (Rogers & Vegas, 2009; Sujewa, 2010). A motivated teacher is one who not only feels satisfied with his or her job, but also empowered to strive for excellence and growth in instructional practice (Basil, 2013). It is the responsibility of the school principal to assess the needs of the teaching staff and advise the school stake holders on how to satisfy them (Basil, 2013).

A study by Lauwerier and Akkari (2015) on quality of basic education in Sub-Saharan Africa asserts that quality in primary education in Sub-Saharan Africa is inseparable from the quality of the teachers involved. The study observed that working conditions of teachers in the Sub Saharan Africa form the heart of any examination of quality of basic education in the region. According to the study, teachers in Sub-Saharan Africa work in disadvantageous environments. Their average class sizes are bigger (1:45) than the rest of the world. The teachers in the region earn low salaries and most of the schools lack formal teacher incentives. Other than South Africa, majority of the countries have no career prospects for their teachers and the teaching profession lacks societal respect. The study focused on quality of education in public primary schools while the focus of the current study was on quality of education in public secondary schools in Kenya.

A study by Save the Children Organization (2011) on teacher motivation linked higher teacher motivation to high student academic grades. According to the study, teachers in developing countries need intrinsic and extrinsic motivational supports. Intrinsic motivational supports like career development, recognition and support, were found to be more effective in sustaining teacher effort and professionalism in the long run and more readily enhanced student achievement. However, before the teacher is motivated to meet his/her intrinsic needs, and hence student needs, his/her basic needs must be met extrinsically through adequate remuneration, performance based incentives and bonuses, provision of quality and adequate teaching and learning materials, and a conducive learning environment. Only when these basic needs of a teacher are met, can then, be possible for higher order needs, which offer true job satisfaction be realized.

The findings of Save the Children (2011) report revealed that teachers in developing countries face several challenges in the course of discharging their duties. The teachers' workload was found to be very high and not commensurate with their salaries. Heavy workload negatively affect the morale of a teacher to work and make teachers resist applying new teaching methods that are learner friendly. Teacher salaries, especially in Africa, were found to be very low and irregularly paid. The study observed that teachers who do not earn enough money to live on, resort to secondary jobs like private tuition which undermine their performance in their primary job as a teacher. The study established that teachers in developing countries also lacked recognition and prestige. Many teachers indicated that respect for their job had decreased in the eyes of students, parents, government and the larger society. Teachers earned low salaries compared to civil servants and could be assigned administrative jobs

that are menial in nature like serving meals and offering security services on school functions. Students joining the teaching profession came from the lower performing academic tracks in the education system, making teaching to be viewed as a job for the less skilled or the last resort for the skilled. This scenario demoralized teachers making them view teaching as a stepping stone to school administration or better jobs elsewhere. The teachers kept pursuing other courses in anticipation for a better job, thereby missing more classes, hence lowering quality of education in their schools.

The Save the Children (2011) report also observed that teachers in developing countries did not participate in formation of education policies. They were viewed as passive implementers of education reforms. The report recommended for an establishment of merit awards for best performing teachers and a structured in service training programme for teachers. Further recommendations require the schools to partner with the community to start income generating activities to support teacher incentive programmes. An establishment of a public education campaign on the importance of teachers was also considered important in restoring the image of a teacher in the society. These could enhance working conditions of teachers and boost their morale to offer quality education. The countries that participated in the study included Uganda, Ethiopia and Egypt, Afghanistan, Pakistan, Tajikistan, Nepal, Bolivia, Philippines and Nicaragua. This study sought to establish the extent to which teacher motivation influence quality of education in public secondary schools in Kenya.

Okumu, Maithya, and Ronoh (2017) carried out a study on the influence of co-curricular activities on students KCSE academic performance in Nakuru County. According to the study, students who participated in drama had better grades in KCSE as opposed to students who did not engage in drama. However, the study found out that 86 percent of the club patrons had no professional training to coach the students due to lack of funds in the school. Majority of the teachers reported to have had little support and motivation from the school administration hence making them reluctant to enroll a big number of students in drama club. This could affect identification and exploitation of student talent and hence the number of awards won by a school in co-curricular activities. The study was carried out in one county (Nakuru) hence limiting generalization of the findings. The current study sought to investigate the extent to which teacher motivation influences quality of education in public secondary schools in Kenya.

## **2: Research Methodology**

### **2.1 Research Design**

The study adopted the correlational research design. According to Mugenda and Mugenda (2003), correlational research design explores relationships between variables and describes in quantifiable terms the degree to which the variables are related. The design was considered appropriate in this study as it could be used to explore relationships between the independent variables (adequacy of physical facilities, teacher motivation levels, adequacy of school financial resources, adequacy of teaching and learning resources) and the dependent variable (quality of education), and quantify the degree to which the variables are related. The researcher collected data using questionnaires, and observation guides in order to determine whether and to what degree a relationship existed between two or more variables.

### **2.2 Target Population**

Target population is the total group of subjects to whom the study wants to apply the conclusion from the findings (Mugenda & Mugenda, 2003). The target population for this study was all the 7,325 public secondary schools in Kenya, comprising of 105 national schools, 283 extra-county schools, 1238 county schools and 5,699 sub-county schools. It also targeted 65,000 public secondary school teachers employed by Teachers Service Commission (TSC) and 7,325 principals (MoEST, 2014).

### **2.3 Sample Size and Sampling Procedures**

According to Orodho (2005), a sample is a small proportion of the target population selected using some systematic procedure that is used for selecting a given number of subjects from a target population as representative of that population. The study used multistage sampling. According to Kothari and Garg (2014), multistage sampling is a sampling technique most preferred for studies involving large geographical areas such as a whole country. It is a method that entails sampling in stages based on one or more criteria and the first stage involves selecting large primary sampling units such as states, followed by smaller units like districts, towns and families. The study used purposive sampling to select three counties to represent high, medium and low social economic regions in Kenya. Babbie and Earl (2010) describes purposeful sampling as a technique of sampling based on researcher's judgment on the most useful units to the study. Purposeful sampling technique was therefore considered appropriate in this study since social-economic potential of a region largely influences quality of education especially academic performance (UNESCO 2005; KIPPRA 2013). Consequently, Kitui (low), Kisii (medium) and Nairobi (high) counties were sampled based on county poverty incidence, county human development index and county poverty severity index (Wiesmann, Kiteme, & Mwangi, 2014; KNBS,

2015). The three counties had a school population (N) of 783 and 8617 teachers giving a sample population (n) of 260 schools and 368 teachers (Krejcie & Morgan, 1970). The school population and sample size is as shown in Table 1;

**Table 1: School population and sample size**

County	Population (N)			Sample (n)		
	Schools	Principals	Teachers	Schools	Principals	Teachers
Kitui	364	364	3991	121	121	171
Kisii	336	336	3072	111	111	131
Nairobi	83	83	1554	28	28	66
<b>Total</b>	<b>783</b>	<b>783</b>	<b>8617</b>	<b>260</b>	<b>260</b>	<b>368</b>

By stratified sampling, the schools were categorized into national schools, extra county schools, county schools and sub county schools. Kothari and Garg (2014) describe stratified sampling as a technique that stratifies a population into non overlapping subgroups, especially when the population is not homogenous, for purposes of representing the peculiarity of each subgroup in the sample. Based on KCSE performance and admission criteria, Public secondary schools have been classified into national schools, extra county schools, county schools and sub county schools. Thus, the population sample of this study consisted of 11 national schools, 34 extra county schools, 120 county schools and 618 sub county schools (MoE Statistics, 2014). To ensure accurate representation of each strata in the sample, the study used stratified proportionate sampling. According to Babbie and Earl (2010), stratified proportionate sampling ensures proper representation of the stratification variables in the sample. Each sample stratum is proportionate to its population stratum hence a more accurate representation of all population variables. The sizes of sample strata were calculated by multiplying the proportion of each stratum in the population sample and sample size. The sample therefore consisted of 4 national schools, 11 extra county schools, 40 county schools and 205 sub county schools. The schools were randomly selected in each category to ensure representativeness of all school types. All school principals were purposively sampled for participation. To ensure representativeness of teachers from all school categories, the total number of teachers sampled was subjected to stratified proportionate sampling based on sampled school strata. The proportions of each school stratum in school sample was multiplied by total number of sampled teachers to give the number of teachers expected to participate from each school stratum. This yielded 6 national school teachers, 16 extra-county school teachers, 57 county school teachers and 290 sub county school teachers. Random sampling was used to sample the teachers from each stratum.

## 2.4 Research Instruments

The study used the teachers and principals questionnaires to collect data. The questionnaires had both structured and unstructured questions.

## 3: Results and Discussion

### 3.1 Influence of teacher motivation levels on KCSE mean score

To establish the extent to which teacher motivation levels influence KCSE mean score, the study used simple regression analysis to establish whether there exists a significant relationship between teacher motivation and KCSE mean score in public secondary schools in Kenya. The result was presented in Table 2.

**Table 2: Influence of teacher motivation levels on KCSE mean score**

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	0.255 <sup>a</sup>	0.065	0.060	1.355587			
ANOVA <sup>a</sup>							
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	24.839	1	24.839	13.517	<0.001	
	Residual	356.497	194	1.838			
	Total	381.336	195				
Coefficients <sup>a</sup>							
Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	3.380	0.472			7.166	<0.001
	Teacher Motivation	0.621	0.169	0.255		3.677	<0.001

a. Dependent Variable: Y\_ KCSE Mean Score

b. Predictors: (Constant), Teacher Motivation

The model in Table 1 was summarized into a regression equation of the form  $Y=a+bX$  where Y is the dependent variable (KCSE mean score), a- is the constant of regression analysis, b - the value of the coefficient of the independent variable and X, the value of the independent variable. The independent variable was teacher motivation levels. Thus the regression equation becomes.

$Y = 3.38 + 0.621 \times \text{teacher motivation}$ . For every one unit increase in teacher motivation, KCSE mean score increased by 0.621 units. Since  $P < 0.001$ , the findings clearly revealed that teacher motivation had a positive significant relationship with school KCSE mean score at  $R^2 = 0.065$ . The model therefore revealed that teacher motivation predict KCSE mean score at 6.5 percent. This implied that there is a statistical significant relationship between teacher motivation levels and KCSE mean score. The higher the level of motivation of teachers in a school, the higher the school mean score and the lower the level of motivation, the lower the school mean score. Since the significance level  $P < 0.001$ , the study concluded that there is a statistical significant relationship between teacher motivation levels and KCSE mean score. The Null hypothesis is therefore rejected.

The findings are consistent to research findings of Basil (2013), OECD (2010), and Sujewa (2010). According to OECD (2011), teachers in the world's leading countries in academic performance such as Finland and Singapore enjoy a variety of incentives based on their academic performance. The teachers enjoy fully paid professional development course every year and have a structured mentorship programme on first posting. Teachers with outstanding performance in academics and co-curricular activities get bonuses amounting to their three months salaries, and other stipends for computer training, research and subscription to relevant journals.

Research by Basil (2013) and Sujewa (2010) in Tanzania and Sri Lanka respectively indicate that teachers in these countries are faced with increased workload, poor teacher pay, declining social status, poor working and living conditions. Consequently, the countries record high level of student absenteeism, teacher transfers between schools, migration of qualified teachers to developed countries in search of better paying jobs, hence low student academic achievement. When teachers work in poor conditions and the schools fail to support them, their input becomes minimal leading to poor quality education in the schools.

#### 4. Conclusion

The study found out that there is a significant relationship between teacher motivation levels and quality of education in public secondary schools in Kenya. Teacher motivation levels were found to be positively correlated to quality of education. Schools that motivated teachers to a great extent recorded higher KCSE mean scores than those that minimally motivated their teachers. By regression analysis, teacher motivation levels predicted school KCSE mean score at 6.5 percent.

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