

## **IMPACT OF LEARNING ENVIRONMENT ON QUALITY OF LEARNING IN PRIMARY SCHOOLS IN IMENTI CENTRAL DISTRICT, KENYA**

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### **ABSTRACT**

The quality of learning that takes place in a school determines academic performance of the pupils and eventually transition rates to secondary schools. In Imenti Central District, public primary schools have been performing poorly over the last six years in Kenya Certificate of Primary Education (KCPE) exams in comparison to other schools in Meru County and the Eastern province. This raises questions on the quality of learning in these primary schools. It is therefore important to determine the impact of learning environment on quality of learning in primary schools in Imenti Central District. The study employed the descriptive survey research design. A sample of 382 subjects by simple random sampling made up of students and teachers and the quality assurance officers was used for the study. Questionnaires and interview schedules were used as tools for data collection. Data was analysed using descriptive statistics. The results of data analysis were presented using frequency distribution tables. The study established that high enrolment trends in primary schools led to overworking the staff members, inadequate teaching and learning facilities, poor sanitation facilities and inadequate classroom. The study thus concluded that the quality of learning is low in the district and hence poor academic performance in the national exams in Imenti Central District. The study recommends that all the stakeholders should co-operate in provision of FPE materials such as textbooks, uniform, teaching resources and facilities; among other recommendations. The findings and recommendations of this study are significant in that the study would unearth the factors that could compromise quality of education.

**Key Words: Learning Environment, Quality of Learning**

### **Introduction**

Edmonds (1981), Kirk and Jones (2004), Daggett (2005), and Lezotte (2010), in studies conducted in developed countries, have established that the quality of learning is found in what they refer to as 'effective schools', which are characterized by: strong instructional leadership, clear and focused mission, safe and orderly schools, climate of high expectations for success, frequent monitoring of learner progress, positive home-school relations, and opportunity to learn/time on task. Lezotte (2010) argued that these seven Correlates of Effective Schools are powerful indicators of successful places where all children learn, regardless of socioeconomic status or ethnicity. This study sought to establish how staffing, resources, environment, enrollment and supervision will affect the quality of learning in public school in Imenti Central District.

Verspoor (2008) conducted a study to determine the conditions and factors of effective schools in sub-Saharan Africa (SSA). Verspoor's (2008) findings indicated that schools associated with quality teaching and learning are characterized by emphasis on classroom factors such as time, grouping procedures, and instructional strategies; emphasis on school factors such as leadership, academic achievement, and staff development; focus on system factors like vision, standards, resources, relevant curriculum, and incentives to provide direction, and community factors such as

home environment; and emphasis community support for education to ensure local relevance and ownership. The Association for the Development of Education in Africa (ADEA) noted that improvements in education quality and better learning achievements of learners in SSA will be determined in classrooms by motivated teachers who have the skills and resources to respond effectively to learner learning needs (ADEA, 2006).

In Kenya, concerns have been raised about the quality of learning in public primary schools especially since the commencement of FPE in 2003 (UNESCO, 2005; Sifuna, 2004). After the introduction of FPE, head teachers in many schools found themselves with more children to enrol than their capacity could hold (Ng'ethe, 2004). While there is a consensus that FPE is an appropriate policy addressing the problem of declining primary school enrolment in Kenya, a serious concern has been raised on the effects the programme has on quality of education (Swamura & Sifuna, 2008; Chuck, 2009; Oketch & Somerset, 2010; Shimada, 2010). Of major concern to this study are the factors that may impede the quality of learning in the schools.

The quality of learning in Imenti Central is of specific concern to stakeholders. According to KCPE results in the province for the last six years, the performance has remained poor. Table 1 shows the mean score and rank of the district in the province.

Table 1  
KCPE Mean Scores for Imenti Central District

Year	Entry	Mean score	Rank	Index
2006	4425	227.41	50/52	-0.49
2007	4434	229.62	48/52	+2.19
2008	4445	225.6	50/52	-4.02
2009	4827	223.1	49/52	-2.50
2010	2611	222.75	51/52	-12.65
2011	2647	234.6	50/52	+3.84

Source: Imenti Central Education Office (2012)

Information on Table 1 shows that schools in Imenti Central District have been performing poorly in KCPE. Education is key to the development of human resources. Despite the government's effort to promote FPE with a view of promoting opportunities for education, public primary schools in Imenti Central District have always been among the bottom four in the last five years in Eastern province at KCPE examinations. This raises the question of quality of learning in these schools. It also means that a lot of pupils miss opportunities in national secondary schools and probably this would negatively affect their future careers and livelihoods. If not addressed, this trend would negate the purpose for which FPE was introduced. Therefore the study sought to investigate the impact of learning environment on quality of learning in primary schools in Imenti Central District?

### **Methodology**

The study employed the descriptive survey research design since it enabled the researcher to describe the state of affairs in schools without manipulating variables. The target population for the study was made up of teachers and pupils in 56 public primary schools in Imenti Central District and the Quality Assurance and Standards Officers (QASOs) in the district. Cluster sampling was

used to select 10 schools out of the 56 schools. The researcher sampled 382 subjects made up of 350 pupils, 10 head teachers, 20 teachers and 2 QASOs to participate in the study.

Questionnaires and interview schedules were used for data collection. To assess reliability the research instruments were administered twice with a break of two weeks. The correlation coefficient from the two sets of data collected was computed using the Spearman Brown prophecy formula. The correlation coefficient for questionnaire for the teachers was 0.938, head teachers 0.845 and that for pupils' questionnaires was 0.94. Since the coefficients obtained were greater than 0.7, the instruments were considered to be reliable. The researcher sought assistance from supervisors to ensure the validity of the instruments.

Data collected was cleaned, coded and entered in the computer for analysis. Quantitative and qualitative data was analysed using descriptive statistics such as frequency counts and percentages. Views of the respondents were analysed on the impact of selected school implementation factors on the quality of education aided by Statistical Package for Social Sciences (SPSS) Version 17. The results of data analysis were presented using frequency distribution tables, bar graphs and pie charts.

## RESULTS AND DISCUSSIONS

### Demographic Data of Respondents

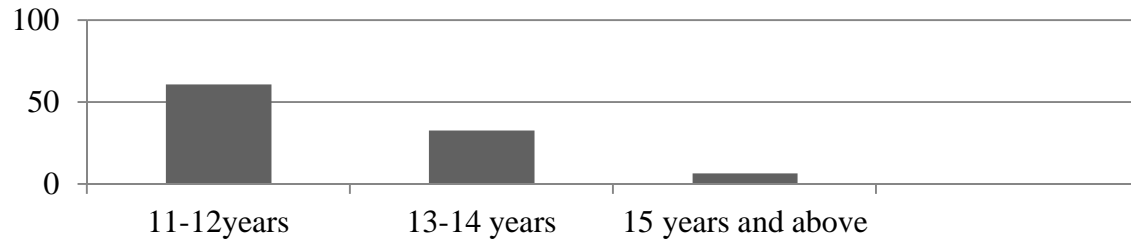
Researchers obtain demographic information from the subjects to understand their characteristics. The study sought to establish how the sample population was distributed by gender and the data presented on Table 4 reveals the findings.

Table 1  
Gender Distribution of Respondents

Category of respondent	Male		Female		Total percentage
	Frequency	Percent	Frequency	Percent	
Head teachers	6	60.0	4	40.0	100
Teachers	10	50.0	10	50.0	100
Pupils	168	48.0	182	52.0	100
DQASO	2	100.0	0	0	100
Total	187		195		

According to the findings in Table 1, majority (60.0%) of the head teachers respondents were males and 40.0% were females. Of the teachers, 50.0% were males while 50.0% were females. The teachers' respondents comprised of deputy head teachers, senior teachers, heads of subjects and class teachers. The information shown in Table 3 further shows that majority of the pupil respondents (52.0%) were girls while 48.0% were boys. This implies that there was heterogeneity in terms of gender among the respondents that took part in this study

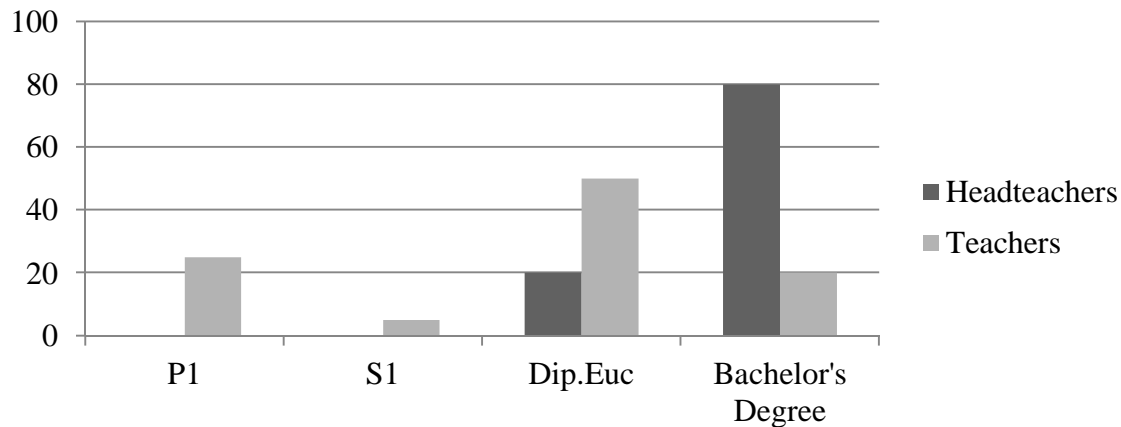
Information was sought on the age of the pupil respondents. This information is illustrated on Figure 1.



**Figure 3.** Age Distribution of Pupils Respondents

Figure 1 shows that majority (60.9%) of the pupils were aged between 11 and 12 years whereas 32.6% were aged between 13 and 14 years and 6.6% were aged 15 years and above. This implies that most of the pupils were in the age bracket recommended for this level of education.

The study sought to establish the academic qualification of the Head teachers and Teachers respondents and this information is presented on Figure 2.



**Figure 2.** Head teachers' and Teachers' Academic Qualification

Figure 2 shows that majority (80.0%) of the head teachers had bachelor degree qualifications while 20.0% of the head teachers had diploma in education qualification. None of the head teachers had a S1, P2, P1 or masters qualification. The requisite qualification to be appointed as a head teacher in primary schools is a minimum of P1 with at least five years teaching experience according to the ministry of education. This implies that head teachers who participated in the study were qualified for that responsibility and were expected to carry out their mandate effectively. Further, the findings reveal that majority (50.0%) of the teachers had diploma in education qualification whereas 25.0% had P1, 20.0% had bachelor's degree and 5.0% had S1 qualifications. This further implies that most teachers had the recommended qualifications and training to teach in primary schools in Kenya.

The length of time spent in an organization leads to the development of shared understandings and experiences (Smoley, 1999). Increased tenure in an organization is positively related to effectiveness and performance (Mahoney, 1988). The study sought to establish the number of head teachers and teachers years of service and the results are shown on Figure 3.

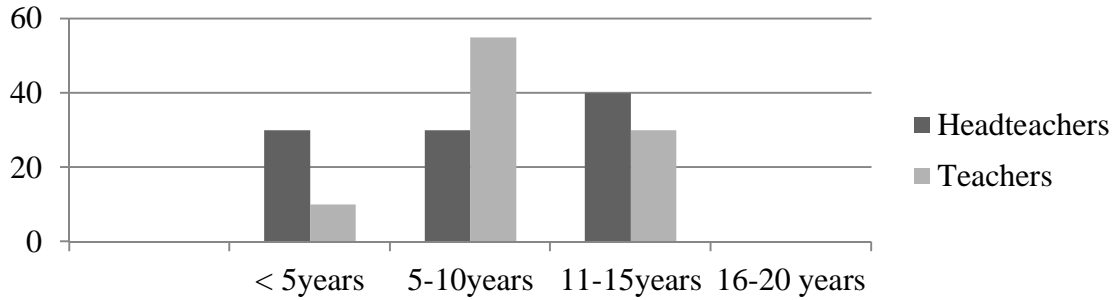


Figure 3. Work Experience as Head teacher or Teacher

As indicated by the information shown on Figure 3, majority (40.0%) of the head teachers who participated in this study had a working experience of between 11-15 years, (30.0%) had an experience of 5-10 years while (20.0%) had worked in headship below 5 years. Eleven (55.0%) teachers had an experience of 5-10 years whereas 30.0% had taught for 11-15 years. This implies that majority of the respondents had taught for a long time and hence they could be able to give school related factors which influence quality of learning in school. It also emerged that both head teachers and teachers could be able to perform their duties effectively since they had a long time experience. In relation to this finding, Borman (1993) and Schmidt (1986) states that work experience improves performance but only indirectly via relevant knowledge and skills because prior work experience provides the opportunity for individuals to acquire relevant knowledge and skills that could in turn enhance performance in the job.

The study sought to establish the responsibilities held by the teacher respondents and the information elicited is captured on Figure 4.

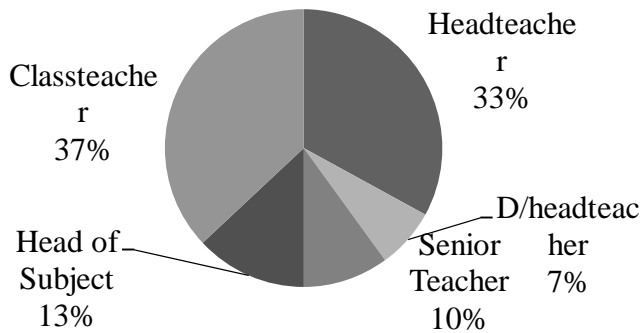


Figure 4. Position in the Teaching Profession

The information presented on Figure 4 shows how the teachers respondents were distributed in terms of the position they held in the schools. It was established that 37% of the respondents were class teachers, 33% were head teachers, 13% were heads of subjects 10% were senior teachers and 7% were deputy head teachers.

**Impact of School Learning Environment on Quality of Learning**

The fourth objective of the study was to find out impact of school learning environment on quality of learning in primary schools in Imenti Central District. To address this objective, respondents were presented with items related with the school environment and were required to state their

levels of agreement on a five point Likert scale. The responses obtained from pupil respondents are presented in Table 2.

Table 2  
Pupils' Response on School Learning Environment

Statement	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
Pupils are well disciplined	79	22.6	110	31.4	10	2.9	70	20.0	79	22.6
Classrooms are attractive and friendly	0	0.0	46	13.1	38	10.9	116	33.1	132	37.7
There is a lot of noise around classrooms that affects concentration level	96	27.4	163	46.6	0	0.0	87	24.9	4	1.1
The school compound is clean all the time	88	25.1	15	4.3	30	8.6	142	40.6	75	21.4
There are adequate toilets for all pupils and teachers	0	0.0	24	6.9	0	0.0	186	53.1	140	40.0
Dustbins are strategically placed in every class to dispose of rubbish	20	5.7	11	3.1	0	0.0	141	40.3	178	50.9
There are water taps strategically placed near the toilets for washing hands	0	0.0	13	3.7	0	0.0	197	56.3	140	40.0
Security of learners is well maintained	45	12.9	93	26.6	7	2.0	177	50.6	28	8.0
Proper hygiene is observed to reduce disease outbreaks	88	25.1	15	4.3	30	8.6	142	40.6	75	21.4
Maintenance and upgrading of school facilities done on regular basis	0	0.0	46	13.1	38	10.9	116	33.1	132	37.7
Social amenities such as play grounds, halls are adequate	34	10.0	0	0	0	0	301	86.0	15	4.0

Table 2 illustrates that pupils agreed with the following statements; there is a lot of noise around classrooms that affects concentration level (74.0%) and pupils are well disciplined (54.0%). However, majority of the pupils disagreed that; there are adequate toilets for all pupils and teachers (93.0%), there are taps strategically placed near the toilets for washing hands (96.3%), dustbins are strategically placed in every class to dispose of rubbish (91.2%) and classrooms are attractive and friendly (70.8%). Further, the study established that majority of the pupils disagreed that proper hygiene was being observed to reduce disease outbreaks, maintenance and upgrading of school facilities was done on regular basis and social amenities such as play grounds, halls were adequate. This was an indication that school environment was not conducive to allow smooth learning and teaching process to take place. Available studies (Earthman, 2004; Fisher, 2000 & Mc Gregor, 2004) show that the quality of the physical environment significantly affects pupils' academic achievements. For instance, Earthman (2004) observed that the building in which students spend a good deal of their time learning does in fact influence how well they learn. Similarly, Fisher (2000) and Mc Gregor (2004) reported that desirable classroom designs include having 'friendly and

agreeable' entrance areas, supervised private places for students, as well as public spaces that foster a sense of community, with particular attention to the color used had an impact on pupils' sense of belonging towards the school.

The study sought to determine the head teachers and teachers' responses regarding the impact of school learning environment on quality of learning. The information that was captured is presented in Table 3.

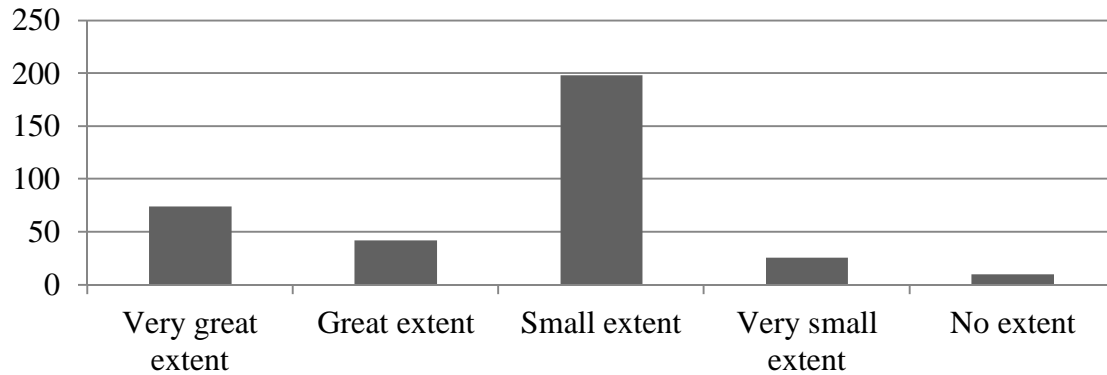
Table 3  
Teachers Responses on School Learning Environment

Statement	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
Pupils are well disciplined	26	87.0	4	13.0	0	0	0	0	0	0
Classrooms are attractive	0	0	0	0	0	0	19	63.0	11	37.0
There is a lot of noise around classrooms	0	0	0	0	0	0	21	70.0	9	30.0
School compound is clean all the time	4	13.0	16	53.0	0	0	10	33.0	0	0
Toilets are adequate	0	0	0	0	0	0	11	37.0	19	63.0
Dustbins are strategically placed	0	0	0	0	0	0	6	20.0	24	80.0
Water taps strategically placed near the toilets	0	0	0	0	0	0	0	0	30	100
Security of learners is well maintained	17	57.0	13	43.0	0	0	0	0	0	0
Proper hygiene is observed	3	10.0	8	27.0	0	0	10	33.0	9	30.0
School facilities maintenance done on regular basis	0	0	0	0	0	0	0	0	30	100
Social amenities are adequate	0	0	2	7.0	3	10.0	17	57.0	8	27.0

n=30

According to the data shown on Table 3, teachers and head teachers agreed that pupils were disciplined, school compound was kept clean all the time and learners' security was maintained. However, they disagreed with the sentiments that classrooms were attractive, tuition area was noisy, toilets were adequate, dustbins were strategically placed, water taps were strategically placed near the toilets, proper hygiene was observed, school facilities maintenance was done on regular basis and social amenities were adequate. This implies that the quality of learning environment in most primary schools was poor and may contribute to poor learning quality.

The extent to which the learning environment impacts on the quality of learning was sought. Respondents were required to answer either very great extent (scored 5), great extent (scored 4), small extent (scored 3), very small extent (scored 2) or no extent (scored 1). The information shown on Figure 5 was captured from the pupils' responses.



**Figure 5.** Pupils Responses on the Extent to which the Learning Environment Impacts on the Quality of Learning

The pupils findings shown on Figure 5 indicate that majority (57%) of the pupils felt that the learning environment has a small influence on the quality of learning. Pupils who felt that the learning environment has very great influence on the quality of learning accounted for 21% while the rest 10%, 8% and 4% said that the learning environment influences the quality of learning to a great extent, very small extent and no extent at all respectively.

The extent to which the learning environment impacts on the quality of learning was sought. Respondents were required to answer either very great extent (scored 5), great extent (scored 4), small extent (scored 3), very small extent (scored 2) or no extent (scored 1). The information shown on Table 4 was captured from the teachers and head teachers' responses.

**Table 4**

**Teachers Response on the Extent to which the Learning Environment Impacts on the Quality of Learning**

Responses	Frequency	Percentage
Very great extent	0	0
Great extent	0	0
Small extent	24	80
Very small extent	6	20
No extent	0	0
Total	30	100

The findings shown on Table 4 indicate that majority (80%) of the teachers felt that the learning environment influenced the quality of learning to a small extent while 20% felt that the learning environment influenced the quality of learning to a very small extent. The study further sought pupils' free responses on the challenges head teachers were facing in ensuring the learning environment was conducive for learning. The responses obtained were categorized and coded to facilitate analysis. The challenges that emerged from the pupils responses are captured in Figure 18.

The challenges facing head teachers in ensuring the learning environment was conducive for learning established from the pupils responses included theft and vandalism of school property



(51.0%) and inadequate finances to put up the necessary infrastructure. The study further sought teachers and head teachers free responses on the challenges head teachers were facing in ensuring the learning environment was conducive for learning. The responses obtained were categorized and coded to facilitate analysis. The challenges that emerged from the head teachers and teachers' responses are captured in Table 5.

Table 5

Head teachers and Teachers Response on Challenges Faced in Ensuring the Learning Environment was Conducive for Learning

Responses	Frequency	Percentage
Inadequate finances to put up the necessary infrastructure	4	13
Theft and vandalism of school property	6	20
Unsupportive parents	7	23
Interference from stakeholders	8	27
Conflict of interest from some members of school management committee	5	17
Total	30	100

The challenges facing in ensuring the learning environment was conducive for learning established from the teachers and head teachers responses included interference from stakeholders, unsupportive parents, theft and vandalism of school property and inadequate finances to put up the necessary infrastructure.

The pupils were asked to suggest strategies that could be adopted to enhance the school environment for quality learning and the information obtained is presented in Table 6.

Table 6

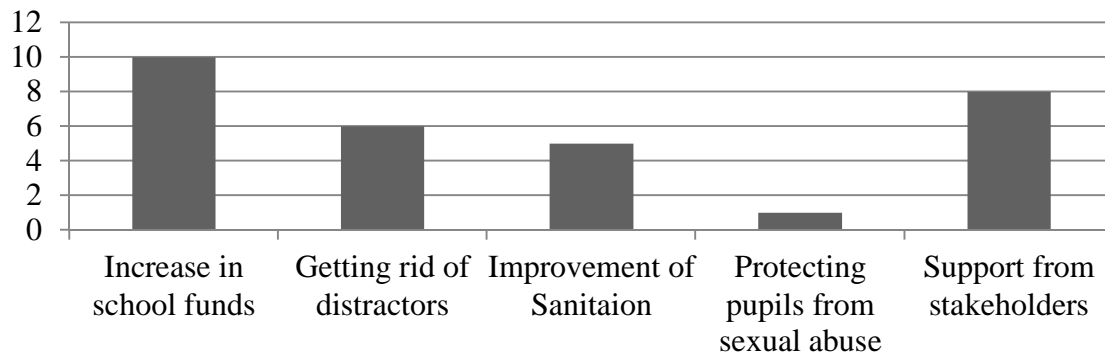
Strategies to Enhance the School Environment for Quality Learning Suggested by Pupils

Strategies	Frequency	Percentage
Classrooms should have cemented floors	78	22
Furniture should be age appropriate	54	15
Sanitary facilities should be adequate and cater for special needs groups	98	28
Ensuring general school hygiene	40	11
Classrooms should have windows	65	19
Guarding pupils against abuse and molestation	9	3
Ensuring that the environment surrounding the school has minimum or free from learning distracters	6	2
Total	350	100

As shown in Table 6, pupils suggested the following in order to enhance the school environment for quality learning: sanitary facilities should be adequate and cater for special needs groups (28%), classrooms should have cemented floors (22%) and with age appropriate furniture (15%) and windows (19%). Other suggested strategies include ensuring general school hygiene (11%),

guarding pupils against abuse and molestation (3%) and ensuring that the environment surrounding the school has minimum or free from learning distracters.

The head teachers and teachers were asked to suggest strategies that could be adopted to enhance the school environment for quality learning and the information obtained is presented in Figure 6.



**Figure 6.** Strategies to Enhance the School Environment for Quality Learning Suggested by Teachers and Head teachers

As shown in Figure 6, teachers and head teachers suggested the following in order to enhance the school environment for quality learning: government to increase infrastructure funds to schools, ensuring schools are free from learning distracters, improving health and sanitation, protecting pupils from sexual abuse and mobilizing support from parents and other stakeholders..

To confirm the above findings, the DQASOs interviewed reported that most school had poor class ventilation, desks in classroom were uncomfortable, schools had inadequate toilets for all pupils and staff members and the schools were surrounded with a lot of noise interferences which affect level of pupils' concentration. These findings concur with Ng'ethe (2004) findings that quality of learning in most public primary schools was largely being affected by poor learning environment.

## Conclusions

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

- i. The learning environment in most schools was found not to be conducive to promote quality learning. For instance, most schools were found to have poor ventilations, uncomfortable desks and inadequate sanitary facilities like toilets for all pupils and those designed to cater for the special needs as well.
- ii. The study also revealed that the increased pupil enrolment affected quality of learning as classes were overcrowded contributing to noisemaking, poor class control, teachers overwhelmed of work and sharing of textbooks amongst the pupils. This in turn implies that the quality of learning is compromised by increased enrolment of pupils in primary schools especially when the schools have inadequate curriculum and physical facilities to cope with the large population.

## Recommendations

Based on the findings of the study the following recommendations have been made:-

- i. There is need for the Government to allocate more funds for improvement of physical infrastructure. This will help in creating conducive learning environment for teaching and learning.
- ii. Stakeholders should be sensitised on the importance of students from different clans mingling and learning together to foster unity and address overcrowding in some schools and under enrolment in others.

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