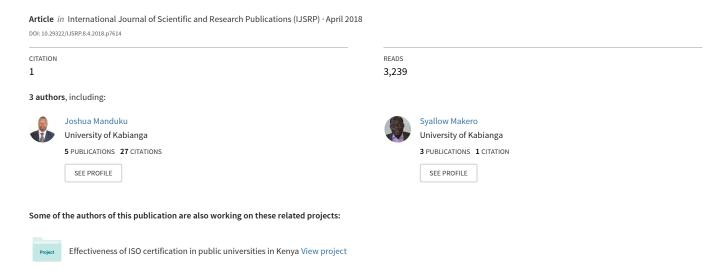
# The Effects of School Based Factors on Academic Performance in Public Primary Schools in Njiru Sub-County, Nairobi Kenya



# The Effects of School Based Factors on Academic Performance in Public Primary Schools in Njiru Sub-County, Nairobi Kenya

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Abstract- The study explored effects of school based factors on academic performance in public primary schools in Njiru Sub-County. Academic performance is a product of socio-economic status, psychological and environmental factors. Education in Kenya plays an important role in every part of life for instance political, economic and social development. Secondary school placement and admission depends entirely on the achievement in the Kenya Certificate of Primary Education (K.C.P.E) in standard eight. Today even sponsorship that children from poor parents are supposed to benefit is offered according to the performance in the K.C.P.E results. In Njiru Sub county there has been a relatively below average academic performance. The study used a sample of six schools, six headteachers and one hundred and forty one teachers. The sampling procedure used by the research was the use of 30% of the target population of 18 headteachers and 470 teachers drawn from schools in Njiru Sub-County. The respondents were 6 headteachers and 141 teachers. Random sampling was used to arrive at schools, and teachers. The research instruments used were questionnaires, interviews and observation. The researcher used descriptive survey design and then adopted mixed methods methodology. The research was based on the Effective Schools Model Theory. Data collection was done after obtaining permission from University of Kabianga and a research permit from NACOSTI. It was also concluded that majority of the schools in Njiru do not have enough textbooks which affected their performance. The study recommends that teachers need to be encouraged to undergo professional growth which will help them to maintain and improve their skills on, quality teaching, classroom maintenance and performance of learners.

Index Terms- School based factors, performance, instruction

#### I. INTRODUCTION

A cademic performance is a product of various factors. These include: socio-economic, psychological and environmental factors. Any form of learning where skills, knowledge and habits of a particular group are transferred from a particular generation through means such as: training, teaching and research is referred to as education. Education often takes places when there is

guidance; however, there are certain instances where there are no guides but learning takes place, (Agunloye, 2011)

This study aims at exploring the effects of school based factors on academic performance in public primary schools. This has been a concern worldwide. Research has shown that successful schools are characterized by certain characteristics or processes which ultimately help learners or the children to learn thus achieving academic goals. Additionally, academic performance is a very important aspect with respect to many academic researchers. Practically it has become a key concern. (Edmond, 1981; K.irk & Jones, 2004)

USA addresses academic performance as an integral aspect with regard to education. A poor performing school is seen as a learning institution that is not able to meet the expected standards over repeated assessment cycles. In this light, low performing schools are seen as poor schools. As such, these schools are often associated with a wide range of problems that would seem to defy applicable solutions. There are many problems that are associated with poor academic performance in public schools (Agunloye, 2011) these include: low academic expectation, high dropout rate, high indiscipline problems, low student, and teacher morale and poorly managed facilities.

Additionally, they focus on the observable symptoms rather than the symptoms on the root cause. Shama Ahanta Metropolitan Assembly is one of the districts Assemblies in the western region of Ghana where schools have shown poor performance in all public examinations and one director had to put it at "their BECE results have been appalling." The schools in the sub-metro have been performing poorly in national performance monitoring tests administered by the Ghana Education Services. And they have also performed consistently poorly in the mock basic education certificate examination BECE. (Agunloye, 2011)

There is a growing number of literature works that have focused on the factors affecting academic performance in Africa. A vast majority of researchers have argued that their class attendance, attitude, study environments, resources, study behaviors, time and study skills heavily determine academic performance in public primary schools. To start with, class attendance has been placed as the predictor of academic performance (Obugu, 2004).

Pupils who attend classes regularly will often be associated with good performance as opposed to the ones that don't. Attitude has also been placed as another determinant for academic performance (Wekesa, 1993). A positive attitude will always be associated with good performance as opposed to a negative one. When a pupil is confident in himself or herself academically; there will be good results as opposed to when there is no self confidence amongst the pupil. Attitude has however been associated with some pupils. As such, this has not been applicable to all. (East Africa).

In Kenya, the major yardstick for measuring educational output is performance in the K.C.P.E and K.C.S.E, with educators and policy makers focusing on testing accountability, curriculum and teacher quality. The importance placed on examinations has made stakeholders come up with strategies aimed at improving students' performance in examinations school choice and related concerns (Juma 2011). Majority of authors have raised their own rationale based on their research. In fact, each author has shown certain factors that are attributed to this case. This is on a general context and relies on factors that have been evident in a majority of public schools found in Kenya. As such, this is not in line with the subject matter. On a district level, there are a growing number of authors that have chosen to critically address this matter with respect to their chosen location. While there has not been much in this particular area (physical area), there are certain works that have reflected some vital aspects with regards to the subject matter. This study has raised factors such as; Head teachers and teachers' relationships and provision of resources, time management as factors that influence academic performance in Njiru Sub County. Therefore, in Njiru the dismal performance could be due to the same factors. The study is going to explore the effect of these factors on the academic performance.

#### **Statement of the Problem**

Academic performance is evaluated based on examinations given and the attainments by learners in such examinations. Provision of good quality education that can foster good academic performance require adequate resources inform of teachers, physical resource in form of textbooks (Mbatia, 2004). The academic performance in national examinations KCPE by public primary schools in Njiru Sub-County has been dismal. The KCPE is marked out of 500 marks and the poor performance is a mark below 250 marks. From the year 2010 to 2013, only two public primary schools got a mean score of above 250. The sixteen remaining schools got a mean score of below 250 (Wario, 2015).

Despite the government measures like allocating money for resources for the free education to boost academic performance in public primary schools, Njiru Sub-County has been persistently perfoming below average. With the below average performance, there is need to investigate why academic performance has remained dismal. Therefore, this study proposes to explore the effects of school based factors such as time management, lack of teachers, textbooks, lack of supervision by headteachers on teachers and headteachers leadership styles on academic performance

#### **Justification of the Study**

Student academic performance is important in all institutions of learning. The rationale for carrying out this study other researchers have looked at other causes of poor performance for example causes like teachers' qualifications, students' background, poverty and even parents' academic background.

Other researchers have also looked into the use of language in giving instructions and poor leadership styles as causes of poor performance but the area of school based factors has not been looked into exhaustively especially the proper use of resources and time (Schneider, 2003).

Academic performance is key and since the schools do receive free primary education money and still perform poorly, therefore the researcher would like to explore the use of resources, time management, head teachers leadership styles and head teachers super vision on teachers.

#### II. REVIEW OF LITERATURE

#### Teacher qualifications

According to Darling – Hammond (1998), a well-qualified teacher is one who was fully certified and held the equivalent of a major in the field being taught. Although the formal qualification of teachers is an important indicator for their knowledge and competence in teaching, it has only limited utility in analyzing how well prepared teachers are for what they have to teach in schools. More detailed knowledge of the courses they have taken during their training needs to be compared to the actual content and skills required to teach the high school's curriculum.

Ruthland & Bremer (2002) explains teacher qualification in two ways - traditional and alternative qualification routes. Traditional certification is when an individual completes an undergraduate degree or post graduate program in education. Alternative routes of certification are based on coursework in pedagogy and subject area without a degree in education. On the other hand, Hardy & Smith (2006) cite short term activities such as mentoring, peer evaluations and workshops as ways other than formal qualifications for improving teaching. More often graduates teachers with first degree content go into teaching if they cannot find another job right away. Although they often get somewhat lower salary than a fully qualified teacher; they choose not to enroll in the one year post- graduate professional training and therefore lack a basic foundation for teaching.

Maundu (1986) concludes that there was significant correlation between teacher qualification and pupil performance in Kenya. The good performance was attributed to excellent instructions given by qualified teachers in addition to other inputs. He establishes that teachers who had graduated from Kenya Science Teachers College were more practically oriented than those who had degrees from public universities while Wilson et al. (2001) suggest that even with the shortcomings of current teacher education and licensing, fully prepared and certified teaches are more successful with students than teachers without this preparation.

Asikhia (2010) conducted a study on students' and educators' perceptions of the causes of poor performance in secondary schools. Subjects for the study were 50 educators randomly selected from 5 schools in Ogun state. Questionnaires

were used to collect data for the study. Percentages and chi square were used to analyze the study. Asikhia's study (2010) revealed that educators' qualifications influence students' academic performance. Many studies (Stronge, *et al.*, 2007; Asikhia, 2010; Dobbie, 2011 & Fakeye, 2012) found that learners achieve more when exposed to better learning conditions and much more qualified educators.

The present researcher also believes that if educators can acquire proper training and certification, matched with the identification and assessment of proper teacher dispositions this will have a significant impact on pupils performance. Limited research is available in Kenya and specifically Njiiru subcoounty on the relationship between teachers' qualifications and performance of pupils. This study will therefore fill this gap.

#### Provision of Resources (Teachers and Textbooks)

Many counties in Kenya are still facing many problems in provision of high quality education. Njiru Sub County is not an exemption. These Challenges are still evident. Factors relating to the economy, manpower are attributed to this case. On a global scale, since World War 11, education has been termed as an integral tool with respect to alleviating poverty and bringing tangible social and economic change. According to article 13 of human rights (1948), education has been termed as a basic right. As such, everyone is entitled to have education for full development of the human personality. Additionally, education has been set as a means for accessing other human rights. This entails that; the former will unlock the latter.

Availability of teaching materials therefore enhances the effectiveness of schools as they are the basic resources that bring about good academic performance in the students. The necessary resources that should be available for teaching and learning include material resources, human resource such as teachers and support staff and, physical facilities such as laboratories, libraries and classrooms.

Material resources include textbooks, charts, maps, audiovisual and electronic instructional materials such as radio, tape recorder, television and video tape recorder. Other category of material resources consist of paper supplies and writing materials such as pens, eraser, exercise books, crayon, chalk, drawing books, notebooks, pencil, ruler, slate, workbooks and so on (Atkinson, 2000).

Good teaching is best done in classes with small number of learners that allow for individual attention. This is critical since in large classes where they are up to eighty seven pupils in a class, a teacher may not be in a position to reach out to each pupil. Therefore the issue of resources has not been looked into in Njiru Sub-County.

#### Head teachers' Leadership Styles

This is a very important aspect with regard to the performance of students in Njiru. On a global scale; learning institutions that have good relationships between the head teachers and teachers have emerged out to be successful as opposed to the ones that have poor relationships. Education management in primary schools entails proper application of management principles in developing resources that are geared towards achieving academic goals (Mbiti 1974).

While vast majorities of heads in Njiru often try to practice this aspect, there is still a need for strategic mechanism for monitoring teachers. In fact, heads in Njiru are obligated to ensure that teachers are in line with the expectations of the pupils, parents and the community.

Head teachers must also ensure that there is motivation, especially towards the teachers. This entails that there must be motivation that enables teachers to value their jobs and even the students. Practically, when teachers in a school have low expectations for students, it is a reflection of low expectations for themselves and their job (Stephen, Lindah, Michelle, and Debra, 2005). This may be as a result of negative perceptions of the students and their circumstances of poor leadership directives, poor facilities and poor classroom management, poor relationship with students and peers, low morale, frustration, fatigue burnout and high turnover (Seels & Richey 1994).

#### III. RESEARCH METHODOLOGY

The study used descriptive survey design and adopted a mixed method methodology. This was used to explore the effects of school based factors on academic performance.

By involving a broad category of stakeholders, the study fits within the cross sectional sub-types of descriptive study design. The sub-type to be used is ex-post facto. This is a design which study variables which are not exposed to direct manipulations or intervention on the part of the research. In this research, the only control provided for is on limiting the responses to specific category, teachers and head teachers of the selected schools.

#### Target Population

There are a total of eighteen public primary schools in Njiru Sub County. There are a total of four hundred and seventy teachers (470). The study was conducted in six (6) of the public primary schools. The head teachers in Njiru are eighteen (18) head teachers of whom the researcher choose the six of them. Sample Size and Sampling Procedures

The researcher dealt with the 30% of the school's population in Njiru Sub-County. The research selected six (6) schools which is 30% of the targeted population of schools in Njiru Sub-County. Further, the teachers were chosen from the six schools. Simple random sampling technique was used to arrive at the respondents from the selected schools. These were six (6) head and one hundred and forty one (141) teachers.

#### **Data Collection Instruments**

Data was collected using the triangulation method that included questionnaire, interviews and observations.

#### Data Analysis and Presentation

The study used Statistical Package for Social Sciences (SPSS) to analyze data. This was done by first cleaning, Coding, entering and then analyzing. The data was analyzed both qualitatively and quantitatively. Quantitative data was edited to eliminate inconsistencies, summarized and coded for easy classification in order to facilitate tabulation and interpretation. Descriptive statistics were used in describing the sample data in a

way to portray the typical respondents and to reveal the general response pattern.

Analyzed data was presented inform of percentages, means, standard deviations and frequencies. Open ended questions which elicited qualitative data were analyzed according to themes based on research questions and objectives and conclusions were drawn.

#### **Ethical Considerations**

Ethical issues were considered. The researcher sought permission from the primary schools selected for data collection. A letter of introduction from the University of Kabianga was sought to ascertain that the researcher was a student at the institution.

#### IV. RESULTS

### Effect of availability of qualified teachers on academic performance

The findings noted that the teachers were qualified as depicted by the 3 (50%) of the headteachers who agreed and the same number who strongly agreed. As noted by Huang & Moon (2009) teacher qualification accounted for approximately 40 to 60 percent of the variance in average of students' achievement in assessment. This implies that availability of qualified teachers contribute to better achievements in examinations.

#### Teachers response on the availability of qualified teachers

Teachers responded on availability of qualified teachers established that majority 123 (89.1%) agreed that the teachers were qualified while 3 (2.2%) dsiagreed. It was however noted that 12 (8.7%) were undecided on their responses. A survey carried by the Kenya National Examinations Council (KNEC) established that teacher professional training and experience had an impact on pupils performance, with pupils who were taught literacy by teachers with higher professional qualifications and those teachers with many years of experience performing better than pupils taught by teachers with lower professional qualifications and fewer years of experience (Kandie, 2015).

#### Headteachers response on Teacher Pupil Ratio of 1:40

The head teachers' responses on teacher pupil ratio of 1:40, the results showed that majority of the head teachers disagreed that the ratio is 1:40. This was shown by 2 (33.3%) who strongly disagreed and 3 (50%) who disagreed. Only 1 (16.7%) agreed. The findings are in line with the findings of Kaloki (2012) which established that there was a higher student teacher ratio which contributed to poor performance of pupils in primary schools in Machakos County. This implies that the classes have a high teacher pupil ratio. The recommended Teacher pupil ration for public primary schools in Kenya is 1:40 (TSC, 2006) which is also ideal ratio set by UNESCO and other international standards.

#### Extent to which textbooks influence academic performance

Table 1: Pupil to book ratio 1:1

	Response	Frequency	Percent	
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agree	5	83.3
strongly agree	1	16.7
Total	6	100.0

The results of the headteachers responses on pupil to book ratio being 1:1 noted that all the headteachers agreed that the book ratio was 1:1. This was indicated by 5 (83.3%) of those who agreed compared to 1 (16.7%) who strongly agreed. The results imply that the number of books are less in relation to the number of pupils. This may be attributed to loss of by the pupils. The government provide books for all pupils but most of them are damaged or lost and are rarely replaced

Table 4.2: Teachers do not use teaching aids because they are not prepared

Response	Frequency	Percent
strongly disagree	6	4.3
disagree	46	33.3
undecided	9	6.5
agree	52	37.7
strongly agree	25	18.1
Total	138	100.0

The results of table 4.2 above noted that 52 (37.6%) do not agree that they do not use teaching aids because they are not prepared, 9 (6.5%) were undecided, while 77 (55.8%) agreed. This implies that majority of the teachers agree they do not use teaching aids because they are not prepared. The study concurs with the findings of Kimosop (2015) which concluded that teachers were not always prepared in the use of instructional resources.

#### V. CONCLUSIONS & RECOMMENDATIONS

#### **Summary**

## Effect of availability of qualified teachers on academic performance

The findings noted that the (3) 50% of the schools indicated teachers in Njiru sub-county were qualified. The findings further reported that (3) 50% of the headteachers do not agree with the teacher pupil ratio of 1:50. The observation checklist on teacher pupil ratio revealed that majority (5) 83.3% of the schools had a teacher pupil ration of 1:60-1:70 while only (1) 16.7% had a ratio of 1:40-1:50.

#### Extent to which textbooks influence academic performance

The findings of the headteachers responses on pupil to book ratio being 1:1 noted that all the headteachers agree that the book ratio was 1:1. This was however contradicted by the teachers who majority (95) 68.8% disagreed with the statement that the book ratio was 1:1. Majority (4) 66.6% of the teachers disagreed that the supplementary book ratio was 1:1 while (1) 16.7% was undecided.

The results of the observation established that maths and language books were shared in all the schools. Four 66.7% of the schools had a ration of 1:3 while 2 had six pupils sharing a book. Other textbooks were also shared by 6 pupils in majority 83.3% while one of the schools (1) 16.7% had one book shared by 10

pupils. On supplementary books, all the schools had very few books which forced 10 pupils sharing 1 book. The findings do not agree with the results of the headteachers questionnaires, this could be attributed to loss of the books and no replacement being made.

### Effects of headteachers leadership styles on academic performance

The results of headteachers practices instructional resources revealed that all the teachers agreed that the headteachers practices on instructional resources affect academic performance in schools. The findings on lack of follow up by headteachers revealed that majority 55.8% agreed.

#### VI. CONCLUSIONS

Based on the findings of the study, the following conclusions were made;

1. The study concluded that qualifications of teachers improved performance of learners. When the teachers are qualified, they are well conversant with preparation of scheme of work, lesson plans and students progressive reports.

The study further concluded that majority of the schools in Njiru do not have enough textbooks which affected their performance. Pupils shared a textbook which in some cases a book was shared by upto 7 pupils. This affected the pupils' completion of work and revision. It is the proper utilization of textbooks that makes an effective school. Textbooks make up the curriculum package and when the learners use them consistently and meaningfully, with appropriate guidance from the teacher they may achieve the intended learning outcomes as well as the improved performance. Quality interaction with the textbooks helps the student integrate the knowledge or content in his or her mental structure: they become part of the furniture of the minds of the student so exposed to the content and skills.

#### REFERENCES

- Agunloye O. (2011) Turning Around Chronically Low-Performing Schools: Diagnostic Framework and Conceptual Model. American International Journal of Contemporary Research. Vol. No.3.
- [2] Asikhia OA (2010). Students and Teachers' Perception of the Causes of Poor Academic performance in Ogun State Secondary Schools: Euro. J. Soc. Sci. 13(2):229-242.
- [3] Atkinson, R. D. (2000). Myths of the new economy. Juncture, 7(1), 54-58.

- [4] Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education policy analysis archives*, 8, 1.
- [5] Dobbie, W., & Fryer Jr, R. G. (2013). Getting beneath the veil of effective schools: Evidence from New York City. American Economic Journal: Applied Economics, 5(4), 28-60.
- [6] Edmonds, R.R. (1981). Search for effective schools. NIE, East Lansing, MI. The Institute for Research on Teaching, College of Education, Michigan State University. Education, New York: Holt, Rinehart, and Winston, 1986.
- [7] Fakeye, D. O. (2012). Teachers qualification and subject mastery as predictors of achievement in English language in Ibarapapa division of Oyo State. Global Journal of Human-Social Science Research, 12(3).
- [8] Huang, F. L., & Moon, T. R. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educational Assessment, Evaluation and Accountability*, 21(3), 209-234.
- [9] Juma F. (2011), The Relationship between Mode of Teacher Motivation and Student Academic performance in Public Secondary Schools in Bungoma North Districts. Unpublished M. Ed Project Report, Moi University.
- [10] Kimosop, P. K., Otiso, K. M., & Ye, X. (2015). Spatial and gender inequality in the Kenya certificate of primary education examination results. *Applied Geography*, 62, 44-61.
- [11] Kirk, D. J. & Jones, T. L. (2004). Effective Schools Assessment Report, San Antonio, TX: Pearson Education.
- [12] Maundu, J.N. (1986). Student achievement in science and mathematics: Case study of Extra Provincial province and Harambee secondary school in Kenya. Unpublished PhD Dissertation of secondary education, MC Gill University, Montreal.
- [13] Mbatia P. (2004) FPE Assessment Report, Nairobi, Jomo Kenyatta.
- [14] Mbiti, D. (1974). Foundations of School Administration. Nairobi: Oxford University press.
- [15] Ruthland, S. K. & Bremer, C. D (2002) 'Alternative Teacher Certification Procedures and Professional Development Opportunities for Career and Technical Education Teachers' Washington D.C.: ERIC Clearinghouse on Teacher Education
- [16] Schneider, B. (2003). Adolescents' extracurricular participation in context: The mediating effects of schools, communities, and identity. *Sociology of education*, 89-109.
- [17] Stephen, D., Lindah, D.H., Michelle, I and Debra, M (2005) School leadership study; developing effective principles.
- [18] Stronge, J. H. (2007). Qualities of effective teachers. ASCD.
- [19] Ubogu, E.E. (2004). The causes of absenteeism and dropout among secondary school students in delta Central Senatorial District of Delta State. Unpublished Doctoral dissertation. Delta State University, Nigeria: Abraka

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