

**INFLUENCE OF SCHOOL BASED FACTORS ON
PROVISION OF FREE PRIMARY EDUCATION IN
DAGORETTI SUB-COUNTY, NAIROBI CITY COUNTY,
KENYA.**

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**A Research Project Submitted in Partial Fulfillment of the
Requirements for the Award of the Degree of Master of
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DECLARATION

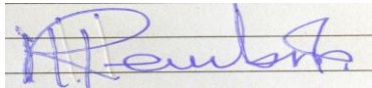
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The research project has been submitted for examination with our approval as University Supervisors

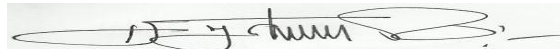


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DEDICATION

I dedicate the research project to my beloved wife Grace Bonareri and my children-Enock, Conelias and Ibrahim.

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ACRONYMS AND ABBREVIATIONS

EFA	Education for All
FPE	Free Primary Education
KCPE	Kenya Certificate of Primary Education
MDG	Millennium Development Goal
MOEST	Ministry of Education Science and Technology
NACOSTI	National Commission for Science, Technology and Invention
SPSS	Statistical Package for Social Sciences
TSC	Teachers Service Commission
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
UPE	Universal Primary Education
WASCE	West Africa School Certificate Examination

ABSTRACT

The purpose of the study was to investigate the influence of school- based factors on provision of Free Primary Education (FPE) in Dagoretti Sub-County, Nairobi. The study was to address the following objectives: to determine the influence of pupil-teacher ratio, physical facilities, adequacy of teaching and learning materials and to assess the extent to which students' grade promotion policy influence the provision of FPE in Dagoretti Sub-County. The study was guided by the Education Production Function theory. The theory refers to all combinations of the inputs that produce any given set of outputs. It can also be explained as the relationship between school and pupil inputs and a measure of school output. The Education Production Theory was initially developed by Coleman et al., (1966) report. The study used cross-sectional survey. The target population in this study was 16 public regular primary school head teachers, 338 teachers TSC Office Dagoretti Sub-County and 3193 class 8 pupils in Dagoretti Sub-County. The study purposely sampled 16 head teachers by census. Thus the study took 20 percent of all the teachers and 13 percent of all the class 8 pupils. Stratified random sampling was employed in the study. The study used questionnaires which were administered to head teachers, teachers and pupils to obtain the data of the study. The observation checklists were used to collect information on the physical facilities in the schools. The study also used document analysis to obtain the information for the study. The quantitative data collected from the questionnaires were edited, coded and analyzed using Statistical Package for Social Science (SPSS) version 21 to inform on descriptive statistics. The collected data was presented using tables and figures. The study used cross-tabulation and a Pearson Chi-Square Test which established that there exists no statistically significant relationship between pupil-teacher ratio, physical facilities, teaching learning materials and automatic grade promotion policy on provision of Free Primary Education as illustrated by P-Value > 0.05 . This implies that pupil-teacher ratio across the classes from class 1-8 exceeds 1:40 as recommended ratio by UNESCO (2006) and TSC (2006). The high pupil-teacher ratio was attributed to low academic achievements in KCPE performance in Dagoretti Sub County. Further, the findings shows that inadequacy of physical facilities and teaching and learning materials negatively influence the provision of FPE in Dagoretti Sub-county. Finally, the study established that students' grade promotion policy negatively influences the provision of FPE in Dagoretti Sub-County. Based on the findings the study recommends that there is need

for the Teachers Service Commission (TSC) to employ more teachers in the Sub-County. The physical facilities in schools ought to be adequate for effective learning. The government should increase capitation in public primary schools in order for schools to buy adequate teaching and learning materials. The policy on students' automatic grade promotion by the ministry of education is not fully implemented in many schools. Repetition of some low achievers in classes makes other pupils to drop out of schools. All pupils in schools should be promoted from one grade to the other regardless of their performance in examinations. Based on the findings, the study suggests; a similar study could be replicated to private primary schools in Dagoretti Sub County. The study suggests that a study could be carried out on influence of school-based factors on provision of FPE in other counties. Finally, a study could be done on the influence of socio-economic factors on provision of FPE in Dagoretti Sub County.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Education is a process of transmitting knowledge, skills, attitudes, values and experiences from one generation to the other. Education is seen as an investment which contributes immensely to the human resource development of any nation (World Bank Annual Report, 2018; Psacharopoulos, 2018). Globally, countries invest in the education of their people to enhance social, economic and political development.

The Universal Declaration of the Human Rights adopted in 1948 in France declared that everyone has a right to education. Article 26 of the Universal Declaration of Human rights notes that education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. The World Conference of Education For All (EFA) held in Jomtein, Thailand in 1990 created new impetus in the provision of basic education. It was observed that to serve the basic needs for all, required more than a recommitment to basic education (UNESCO, 2000).

The Dakar Framework for Action held in Senegal (2000) provided the Education for All movement with a new momentum to resolve the inequalities in the provision of Education For All (EFA). In the forum, a global synthesis report gave a comprehensive scenario regarding the state of basic education in the world. One of the goals of Education For All (EFA) according to the World Education Forum (2000) was to improve all aspects of the quality of education and ensure excellence of all so that recognized and measurable learning outcomes are achieved. Therefore, the primary objective of FPE was to provide enrolment opportunities for those children who were out of school due to schooling constraints. Consequently, the Education For All goals were endorsed by the Millennium Development Goals (MDGs) which set targets to ensure that free and compulsory education for all will be attained by 2015

(UNESCO, 2000). Due to the availability of financial resources in developed countries, Education For All (EFA) has been realized.

In spite of the introduction of Free Primary Education (FPE) to meet Universal Primary Education (UPE) in developing countries, there are serious challenges in sub-Saharan Africa (UNESCO, 2014; Nudzor, 2015; Wambui, 2013; Khakiti, 2013; Ntuara, 2014; Ndege, 2015; Ngugi, Mumiukha, Fedha and Ndiga 2015; Murunga, 2016; Barimbui, 2019). Educational systems are characterized with high dropout rate, high repetition rate and low completion rate (UNESCO, 2007). The World Bank (2007) education report for African countries also indicates that education systems are characterized by low completion rates, low promotion rates, low retention rates, low performance compared to developed countries like the USA, Singapore, Japan, Australia, Canada, United Kingdom and Germany.

Several years later since the Universal declaration of Human Rights was made, the progress towards provision of compulsory and free education has been agonizingly slow in developing countries. Due to the glaring inequalities in education provision in many countries, an international initiative body was launched at the 'World Conference on Education for All' (Jomtein, Thailand 1990) by the United Nations Development Program (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Fund for Population Activities (UNFPA), the United Nations Children's Fund (UNICEF) and the World Bank. The participants in the conference endorsed the universalization of Free Primary Education (FPE).

Kenya is one of the signatories to the Jomtien Agreement (1990) and the Dakar Framework for Action (2000) to achieve Education For All (EFA) and Millennium Development Goal 2 (MDGs) by the year 2015.

The provision of Free Primary Education (FPE) in Kenya was first introduced in the 1974. The programme was however abolished in 1988 under the Structural Adjustment Programs (SAPs) to ease the financial burden on the public education system. In 1988, the Kenyan government introduced a cost-sharing policy that was recommended by the Kamunge Commission. According to Kamunge Commission (1988), the parents were to contribute

more towards the education of their children. The cost-sharing policy somewhat led to high wastage within the primary education in the form of low enrolment, grade repetition, high school dropouts, low completion and poor primary to secondary transition rates (Bedi, Kimalu, Manda & Nafula (2002), Kimalu, Nafula, Manda, Bedi, Mwabu & Kimenyi (2001).

To reverse the poor trends in educational achievements, the government initiated FPE programme in January 2003 with an aim of actualizing the provision of basic education as a right to every Kenyan citizen. The FPE policy was congruent with the 2001 Student's Act that calls for affordable and equitable access to education in Kenya. The Student's Act states that the government should provide free and compulsory primary education.

Since the implementation of Free Primary Education (FPE) programme in Kenya in 2003, remarkable success with regard to increased enrolments has been made but the challenges are enormous (UNESCO, 2014; Ngugi et al. (2015). At a public lecture held at Kenyatta University on Reforms in the Kenyan Education Sector (2015), the then Education Cabinet Secretary, Kaimenyi observed that increased enrolments in public primary schools had led to overcrowded classrooms, high pupil-teacher ratios and a shortage of instructional materials for teaching and learning. These challenges may be reflected in pupil completion rates and primary to secondary transition rate, pupils per textbook ratios, gross enrolment of pupils and KCPE performance in national examinations.

The Economic Survey (2020), indicates wastage with regard to pupil completion rate and primary to secondary transition rates (2015-2019); which is an issue of particular concern. In an educational system, wastage refers to the number of pupils who dropout out of school and those that repeat classes in schools. Kapur (2018) notes that educational wastage is a major hindrance within progression of individuals, communities and the nation. A submission by Migosi (2011), notes that minimizing wastage results to achieving the desired goals and objectives in schools.

In spite of many policies and interventions by the government to enhance the provision of Free Primary Education (FPE), the retention of pupils at primary

level of education is low compared with secondary level. Retention in Standard 4 to Standard 7 improved compared to that of Standard 1 to Standard 3. However, progression from Standard 7 to Standard 8 depicts a sudden drop for all the years (Kenya National Bureau of Statistics, 2017).

A study by the Economic Survey (2020) indicates that, direct costs on uniforms and meals; indirect costs; poverty; insecurity; long distances covered to schools as well as lack of food and water at home affect the provision of FPE. The survey also noted that, the children that are most affected are those from low economic status and urban informal settlements.

The MOE (National Education Sector Strategic Plan 2018-22) also observed that safety issues when girls are in transit and at school, inadequate sanitary facilities at school as well as early pregnancy affects the provision of FPE. Consequently, pupil-teacher ratios, physical facilities, teaching and learning resources materials and students' automatic promotion policy may significantly influence the provision of FPE.

Dagoretti Sub-County is one of the 11 Sub-Counties in Nairobi City County, Kenya. According to the Kenya Population and Housing Census (2019), majority of the people living in the sub county are the middle and low income earners. Basing on the Kenya Population and Housing Census (2019), the number of students who left school before completion was 61,613 which translate to 15.5 percent. Despite the government's effort and interventions to provide FPE in the country, Dagoretti Sub-County is among the top 4 sub counties in Nairobi City County that lead in terms of education wastage. The study therefore, sought to investigate the influence of school-based factors on provision of Free Primary Education (FPE) in Dagoretti Sub-County, Nairobi.

1.2 Statement of the problem.

In spite of the Kenyan government's effort in enhancing the success of FPE, the issue of particular concern in public primary schools is efficiency which may be reflected in terms of the number of pupils that complete school, school dropouts, repeaters, net enrolment of pupils, pupil-teacher ratio, pupil-textbook ratio and KCPE performance in national examinations. According to the

Economic Survey (2020), the national government spent 15.3 percent of its revenue on education. In spite of huge budgetary allocation by the government to support the provision of Free Primary Education in the country, Dagoretti Sub-County is among the top 4 sub counties in Nairobi City that lead in terms of education wastage. Although the government has put interventions to enhance provision of FPE, the input into primary education in Dagoretti, Nairobi City County does not match the output, an indication that some schools could be inefficient in terms of provision of primary education. Studies have been carried out like Osero and Orodho (2018), Chirchir, Manduku and Makero (2018) and Musyoka (2018) but all focused on performance in primary schools. Basing on the studies that have been carried out, there is no evidence of research that has been done on the influence of school- based factors on the provision of FPE in Dagoretti Sub- County, Nairobi. Therefore, it is against this background that the study set out to investigate the influence of school-based factors on provision of FPE in Dagoretti Sub- County, Nairobi

1.3 Purpose of the study

The purpose of the study was to investigate the influence of school- based factors on the provision of Free Primary Education (FPE) in Dagoretti Sub-County, Nairobi.

1.4 Research Objectives

The study was to address the following objectives:

- (i) To determine the influence of pupil-teacher ratio on provision of Free Primary Education in Dagoretti Sub-County, Nairobi City Council, Kenya.
- (ii) To establish the influence of physical facilities on provision of Free Primary Education in Dagoretti Sub-County.
- (iii) To determine how adequacy of teaching and learning materials influence the provision of Free Primary Education in Dagoretti Sub-County.

- (iv) To assess the extent to which students' grade promotion policy influence the provision of Free Primary Education in Dagoretti Sub-County.

1.5 Hypotheses

The study tested the following null hypotheses at 0.05 level of significance.

Ho¹ There is no significant relationship between pupil-teacher ratios and provision of Free Primary Education in Dagoretti Sub-County.

Ho² There is no significant relationship between physical facilities and provision of Free Primary Education in Dagoretti South Sub-County.

Ho³ There is no significant relationship between teaching-learning materials and provision of Free Primary Education in Dagoretti South Sub-County.

Ho⁴ There is no significant relationship between students' grade promotion policy and provision of Free Primary Education in Dagoretti South Sub-County.

1.6 Significance of the study

The findings may be used by the Boards of Management (BOM) of various public primary schools on the status of the current physical facilities in their schools and how they affect Free Primary Education. The BOM may use the research findings to formulate and initiate the construction of school facilities.

The findings may be used by the educational planners to determine which school-based factors the government should invest in so as to attain maximum output from primary school level. Through the research findings, educational planners may be able to form educational policies that will eliminate grade wastage in primary education sector.

The findings from the study may guide the Quality Assurance and Standards Officers (QASOs) to assess learning in schools in the Sub County. The report may help the QASOs to identify schools that may need urgent attention in

terms of infrastructure. Teacher Service Commission may use the findings to address the issue of staffing of teachers in primary schools in the county.

The findings from the study may be used by the Curriculum Support Officers in the Sub County for purposes of providing quality teaching and learning hence improve KCPE performance.

The findings from the study may also help the pupils, teachers and head teachers of primary schools in Dagoretti to express their views in terms of the needs in schools. Despite the fact that the pupils, teachers and the head teachers may not have a direct link with the Ministry of Education especially the pupils; this may act as an opportunity for them to communicate.

1.7 Limitations of the study

These are drawbacks that are encountered when conducting the study of which the researcher may have little or no control at all (Matula, Kyalo, Mulwa & Gichuhi, 2018). The researcher anticipated to encounter the following challenges: First and foremost, it was not easy to control the attitudes of some of the respondents' as they would have given socially acceptable answers to please the researcher and, this may have affected the validity and reliability of their responses. Therefore, the respondents were assured of confidentiality of their responses and that the information would be used for academic purposes only. Secondly, the head teachers and the teachers in the study may fail to give the correct information due to the fear of victimization. Hence to solve this problem, the researcher assured the head teachers and the teachers that the findings of the study would be used for academic purposes and that their responses would be confidential.

1.8 Delimitation of the study

Leedy and Ormrod (2016), indicates that delimitation of the research provides a clear demarcation of the exact boundaries of the research problem. This study focused on the influence of school based -factors on provision of Free Primary Education in Dagoretti Sub-County. The study investigated the influence of

pupil-teacher ratio, physical facilities, teaching and learning materials and grade promotion policy on provision of Free Primary Education in Dagoretti Sub County. The study focused on all public primary schools in the sub-county since they are not many. The research restricted itself to learners, teachers and the head teachers of public primary schools within the sub county. The views of other stakeholders which include the parents and the support staff were not considered.

The findings from the study were county specific and would therefore not be generalized to other counties in Kenya where other factors not considered for Dagoretti Sub County such as family background and socio-economic could dominantly influence the provision of free primary education.

1.9 Assumptions of the study

The study assumed that:

- (i) All the respondents would participate and provide reliable information in the study.
- (ii) There is probably a relationship between school-based factors and provision of Free Primary Education.
- (iii) The views of the respondents would represent the target population

1.10 Definition of significant Terms

Free Primary Education- refers to a provision by the Government of Kenya that requires that learners in public primary schools access learning processes without paying fees.

Physical facilities- refers to the school buildings, classrooms, toilet facilities, libraries, laboratories and other material resources and infrastructures that would affect provision of Free Primary Education. The levels of adequacy were used as the indicators of physical facilities.

Pupils' automatic promotion- refers to a practice which allows learners to transit from one class to the next without any assessment or evaluation.

Pupil-teacher ratio- refers to the average number of pupils per teacher at a specific level of education in school. The prescribed PTR for public primary schools in Kenya is 40:1 (TSC, 2006) which is also a recommended ratio set by UNESCO (2006). The PTR was grouped as follows: very adequate PTR less than 40:1, adequate PTR 40:1, fairly adequate PTR 50:1 and inadequate PTR more than 60:1

School-based factors-refer to factors which originate from within the schools that affect schools' internal efficiency in providing Free Primary Education.

Teaching and learning resource materials- refers to materials a teacher may use in teaching and learning process to achieve the intended learning objectives. The level of adequacy of textbooks, revision materials, teaching aids and computers were used as the indicators of teaching and learning resources.

1.11 Organization of the Study

The study comprised of five sections as follows: Chapter one focuses on the background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, limitations of the study, delimitation of the study, assumptions of the study, definitions of significant terms and organization of the study.

Chapter two discusses the literature review. The areas discussed include the following: the concept of Free Primary Education, the influence of pupil-teacher ratio on provision of Free Primary Education, the influence of physical facilities on provision of Free Primary Education, adequacy of teaching and learning materials on provision of Free Primary Education, the influence of students' grade promotion policy on provision of Free Primary Education, summary of related literature review, theoretical framework and finally the conceptual framework.

Chapter three covers the research methodology. The areas covered include the following: research design, the target population, sample size and sampling procedure, the research instruments, validity of the instruments, reliability of

the instruments, data collection procedures, data analysis techniques and ethical considerations.

Chapter four covers data analysis, presentation and discussion. Chapter five deals with the summary of the findings, conclusion, recommendations and suggestions for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This Chapter explores the relevant literature which relates to the study. The section therefore examined the concept of Free Primary Education; the influence of pupil-teacher ratio on provision of Free Primary Education; influence of physical facilities on provision of Free Primary Education; adequacy of teaching and learning materials on provision of Free Primary Education; influence of students' grade promotion policy on provision of Free Primary Education; a summary of the literature; theoretical framework and the conceptual framework of the study.

2.2 The Concept of Free Primary Education (FPE)

The inception of Universal Primary Education (UPE) dates back to the 1948 Universal Declaration of Human Rights in Paris where basic education was recognized as a human right (UN, 1948). Further, elementary education was made compulsory. Several years later, the progress towards provision of compulsory and free education has been slow especially in developing countries (UNESCO, 2014). In order to achieve Universal Primary Education (UPE) and for member countries to be more recommitted in provision of basic education, universalization of Free Primary Education (FPE) was endorsed in Education for All (EFA) conference held in Jomtein, Thailand, 1990 (UNESCO, 2000). After the endorsement, the policy of Free Primary Education (FPE) was implemented in many countries as a means to realizing the 2015 Education for All and Millenium Development Goals international targets (Oketch and Inoue, 2008). Therefore, the essence of Free Primary Education (FPE) was to increase access and retention of learners from poor households to complete primary schooling hence attaining Universal Primary Education (UNESCO, 2010; Simiyu, 2019). In 2005, the United Nations Children's Fund (UNICEF) in conjunction with the World Bank launched the

School Fee Abolition Initiative (SFAI) to assist countries attain UPE through elimination of school fees and/or implementation of exemptions, subsidies and incentives to reduce education costs for the poor (World Bank, 2009; Tomasevski, 2006; Ogola, 2010).

According to UNESCO (2014) Institute for Statistics data and UNESCO (2015) the findings reveal that developed countries like Canada, United States, France, United Kingdom, Australia and New Zealand have achieved Universal Primary Education. However, the attainment of Free Primary Education (FPE) especially in poorest countries of South Asia and Sub-Saharan Africa has remained elusive in many countries (World Bank, 2006; UNESCO, 2010; UNESCO, 2014).

In Kenya, Free Primary Education (FPE) was first introduced in 1974 when the government at that time abolished school fees for standards 1 to 4. In 1978, the elimination of school fees was extended to standards 5 to 7. Subsequently Free Primary Education (FPE) programme was reintroduced in 1979 and most recently 2003.

2.3 School-based factors affecting the provision of Free Primary Education (FPE)

A number of scholars have identified school-based factors that affect the provision of FPE. These factors can determine the dropout, repetition, completion and pass rates in public primary schools.

A study by Egueh and Zani (2014) on factors affecting the implementation of Universal Primary Education in Semi-Arid areas of Kenya: The Case of Garissa County established that high enrolment rate of pupils that followed the introduction of Free Primary Education in Kenya in 2003 brought insurmountable challenges which are yet to be resolved. These challenges have slowed the implementation of Free Primary Education. The findings of a study by Egueh and Zani (2014) also concur with the observations that were made by UNESCO (2005) Assessment Report on challenges of implementing Free Primary Education in Kenya.

Education for All (EFA) Report (2010) observed that primary level of education in Kenya is characterized by high wastage; an incidence in a country's education, of dropout and repetition taken together.

A study by Anita (2013) on controversy over grade repetition in Afghanistan established that repetition of pupils in classes is inefficient and ineffective in terms of academic and social-emotional development of students. In addition to that, repeaters tend to drop out from school earlier and may end up with behavior problems and low-self esteem. In this study therefore, the researcher was limited to find out the influence of a few school-based factors on provision of Free Primary Education (FPE). These factors were: pupil-teacher ratio, physical facilities, teaching and learning materials and grade promotion policy.

2.3.1 Influence of Pupil-teacher Ratio on Provision of Free Primary Education

A study by OECD (2015) on Education at a Glance: OECD Indicators established that smaller class sizes are perceived as allowing teachers to spend less time managing classes and more time with each individual pupil. This concurs with a study done earlier by Schanzenbach (2014) Does Class Size Matter? The findings of the study revealed that the benefit from students enrolled in smaller classes is greater for low-income students.

A study by Waita, Mulei, Mueni, Mutune and Kalai (2016) on pupil-teacher ratio and its impact on academic performance in public primary schools in central division, Machakos County, Kenya also found out that pupil-teacher ratio is a significant predictor of pupils' performance. The analysis established that there was -0.323 correlations (R) between PTR and test scores. The negative index therefore showed an inverse relationship between pupil-teacher ratio and their performance. Therefore, increased pupil-teacher ratio hinders effective interaction which adversely affects students' performance in national examinations. The findings supports a survey conducted by the Government of Kenya (2008) which revealed that variation in pupil-teacher ratio across the country has a negative effect on national examination performance in public

primary schools. According to a study by Muller and Hoffer (2015) in Illinois USA, the achievements of Mathematics scores relied on the size of the class enrolment. In their submission, class size is significant in determining the development of Mathematics achievement. A study by Adino (2015) in Butere Sub-County on performance in Mathematics in KCSE revealed that teacher adequacy and quality are among the key variables that determine academic performance in Mathematics. The study recommended that the government should employ more Mathematics teachers to improve on the student- teacher ratio.

The findings by scholars that small class sizes matter however have received criticisms in a number of studies. In their submission, Shen and Konstantopoulos (2019) argue that reducing class size does not automatically guarantee improvements in student performance. According to Duflo, Dupas and Kremer (2008) in a study conducted in Kenya shows that at the sample mean in lower grades, reducing class size from 80 to 40 without any change does not lead to a significant increase in test scores. A similar study done by Benbow, Oliver and Said (2007) in India showed no effect on reduction of class size despite hiring of remedial education teachers for the learners. Basing on the studies that have been carried out, some scholars show that pupil-teacher ratio affects performance while others strongly refute these findings concluding that pupil-teacher ratio has little to no effect on pupils' performance. The interest of the researcher was to investigate what the case is in Dagoretti Sub-County, Nairobi City Council, Kenya.

2.3.2 Influence of Physical Facilities on Provision of Free Primary Education (FPE)

A study by Amanullah and Adeeb (2014), observed that physical facilities in which students learn are very important and without conducive environment, effective learning cannot take place. According to Saeed and Wain (2011), physical facilities in schools are fundamental factors for better learning environment and achievements, and outcome of students. Jagero (2013)

observed that the quality of facilities supplied to schools and efficient utilization of such facilities certainly influences the quality of the outputs. According to Bakari, Likoko and Ndinyo (2014), adequate utilization of physical facilities in schools leads to better performance in KCSE examinations. They also noted that schools with adequate physical facilities have a better academic advantage over those with few or little physical facilities. UNESCO (2008) Report indicated that poor class lighting, poor conditions of classes and poor conditions of desks for the children contributes to low participation of children in Uganda more especially for the girl child. According to UNICEF and WHO (2018 :8), adequate water, sanitation and hygiene facilities in schools improve access to education and learning outcomes especially for girls, by providing a safe, inclusive and equitable learning environment for all learners. A study by Britto (2012) revealed that physical condition of space in schools is important since it affects the health and safety of both children and adults. Nepal and Maharjan (2015) noted that school's physical facilities provide and maintain safety, cleanliness and creativity learning environments to students which encourage them to perceive high achievements and outcome. A submission by Limuli (2009) indicated that provision of sufficient learning facilities at all levels including equipment and the human resources enhances quality and relevance of the imparted skills to the learners. A study by Mary, Inger and Tracy (2017) established that the learning experience among students is improved when the class size is decreased. Sapelli and Illanes (2016) also observed that students tend to achieve better ratings in schools when the class sizes are small. A study by Benton and Pallet (2013) also confirmed that students report learning more when class sizes are smaller. Maloney (2020) also found out that small class sizes result in better academic achievements for the learners. A study by Kapur (2019) on the impact of resource utilization in education established that institutions and the learning outcomes of learners are influenced by appropriate utilization of the school resources. A study by Mboweni (2014) noted that poor facilities and unreliable infrastructure in schools negatively influenced the attendance of the learners. This means that there is low

participation of pupils in schools due to increased dropouts. The study findings also established that overcrowding of pupils in classes resulted in learner absenteeism. Akomolafe et al. (2016) in their study, “The Impact of Physical Facilities on Students Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria” observed that physical facilities that are of high quality motivate students towards learning. The findings from Philippine Education for All (2015) affirmed that to increase learners participation in schools, facilities such as classrooms, desks, appropriate class sizes among many others are necessary. This findings supports a study done in Embu County on influence of provision of physical facilities on participation in ECD public primary schools where Muthanje, Khatete and Riechi (2019) established that physical facilities influenced children’s participation in ECD classes. It is against this background that this study therefore looked at the influence of physical facilities on provision of Free Primary Education (FPE) in Dagoretti Sub-County in Nairobi.

2.3.3 Adequacy of Teaching and learning -Materials on Provision of Free Primary Education (FPE)

According to UNESCO (2007), teachers and learners need adequate resourcing to improve the quality of teaching and learning. A study by Ayodele and Ogbiye (2018), noted that the extent to which an educational institution attains her objective could be related to the educational resources utilized. A submission by Musyoka (2018) on school based factors influencing students’ performance in Kenya Certificate of Secondary Education (KCSE) in public secondary schools in Kathiani Sub-County indicated that teaching resources are critical in determining the academic performance of schools. A study by Munguti (2016) on learning resources and students’ academic performance in Geography in Makueni County, Kenya established that there is a relationship between availability of learning resources for the teaching and learning of Geography in public schools in Makueni County and KCSE performance in the subject in the subject in the country. Therefore, inadequacy or absence of

teaching and learning resources makes teachers handle content in an abstract manner. For effective teaching and learning, textbooks and other resource materials are necessary. A study by Momoh (2010) on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE) indicated that learning resource materials have a significant effect on students' achievements since they facilitate the learning of abstract concepts and ideas. Lyons (2012) affirmed that learning is a complex activity that involves interplay of students' motivation, physical facilities, teaching resources and skills of teaching and curriculum demands. Therefore, availability of teaching and learning resources enhances the effectiveness of schools as they are the basic resources that lead to good academic performance. Lyons (2012) also noted that teaching and learning resources facilitates learning of abstract concepts and ideas and discourages rote learning. Atieno (2014) reiterated that inadequate teaching and learning resources in schools compromises education and this inevitably is reflected in low academic performance, high dropout rates, problem behaviours, poor teacher motivation and unachieved educational goals. A study by Laurillard (2013), pointed out that lack of effective teaching and learning technologies in Botswana results to dismal student academic performance. The study showed that students' academic achievement is mainly caused by lack of relevant textbooks and other print materials such as publications and handbooks. Onyango (2008) observed that high number of pupils enrolled in schools after the introduction of Free Primary Education (FPE) by the government in Kenya has led to problems of pupil- textbook ratios, high pupil-teacher ratio and overcrowded classrooms which affect participation in public primary schools. Therefore, learning resource materials being important variables in the teaching and the learning process, the researcher set out to investigate the adequacy of teaching and learning materials in the provision of Free Primary Education (FPE) in Dagoretti Sub- County, Kenya.

2.3.4 Influence of Grade Promotion Policy on Provision of Free Primary Education

Students' grade promotion policy is also referred to as social promotion where a learner keeps pace with age mates with or without learning taking place to help reduce grade repetition and student dropouts from schools. A study by Anita (2013) revealed that there is a controversy over grade repetition. Arguments that support the students' promotion policy and those against are centred on its credibility as a viable alternative to grade retention and better learning outcomes.

A study by Ndaruhutse (2008) on grade repetition in primary schools in Sub-Saharan Africa: an evidence base for change established that students' grade promotion policy in schools saves costs for both governments and households since it reduces grade repetition, increases survival and completion rates by reducing dropout rates and increases the number of years low achieving learners spend in school.

A study done in Uganda by Okurut (2015) on the effect of automatic promotion on students' learning achievements observed that automatic promotion on students' has a positive impact on learning outcomes. However, Larsen and Valant (2018); Manacorda, 2012; Mariano, Martorell and Berglund (2018); Eren, Ozkan and Depew (2017) revealed that grade retention policies have negative impacts on students in the 8th grade. The finding supports a study done in Kisumu West Sub County on implementation of students' automatic grade promotion policy in secondary schools where Arogo (2017) established that there is a direct relationship between students' automatic grade promotion policy and the quality of the grades obtained by the student.

Mariano et al. (2018) established that there is no evidence of the effect of retention on dropout found by Eren et al. (2017) for 4th graders in Louisiana but the negative effects on credits and highest grade attained differ from the null effects for Florida 3rd graders as Schwerdt et al. (2017) showed in their study. Critics of grade to grade promotion policy argue that schools fail to achieve the objectives and goals of education. Many countries do not have adequate

resources and repetition of slow learners in the school system creates congested classrooms leading to high student classroom ratios and high students'-teacher ratios thus lowering the overall quality of education (Chimombo, 2005). Students' automatic grade promotion policy negatively affects the overall quality of education since it eliminates competition, demotivates the learners and teachers hence lowering teaching and learning outcomes (Koppensteiner, 2014; Taye, 2003; and Chohan & Qadir, 2011). A study by Lyonga (2020) also showed that the policy of collective promotion adversely affects the attainment of literacy, numeracy, and essential life skills of pupils.

Since various scholars have different views on the influence of automatic grade promotion policy on provision of FPE, the researcher set out to establish what the case is on the ground.

2.4 Summary of the Literature Review

The section reviewed school-based factors in provision of Free Primary Education both locally and internationally. A review of the literature on pupil-teacher ratio indicated that some scholars show that pupil-teacher ratio affects performance (OECD, 2015; Muller & Hoffer, 2015; Wakoli, 2016; Verwimp, 2013; Akiyeampong et al. 2011; Manjanga et al. 2010) while others refute these findings (Hanushek, 1999; Duflo et al. 2008; Benbow, et al. 2007). The literature review on physical facilities on provision of FPE indicated that availability, adequate and efficient utilization of physical resources affects performance and participation of pupils in schools (Akomolafe, 2016; Philippine Education for All, 2015; Bilaya et al., 2015; Amanullah & Adeeb, 2014; Bakari et al. 2014, UNESCO (2008) Report. The literature review on teaching and learning materials on provision of FPE illustrated that effective teaching and learning is influenced by adequate, quality and a variety of relevant teaching materials which in turn affects students' academic performance in Primary Leaving Examinations (Ayodele & Ogbiye, 2018; Musyoka, 2018; Mungati, 2016; Momoh, 2010; Lyons, 2012; Atieno, 2014; Laurillard, 2013). Literature on students' grade promotion policy on provision of FPE showed that grade promotion policy reduces repetition, increases

survival and completion rates by reducing dropout rates (Larsen & Valant, 2018; Mariano et al. 2018; Eren et al. 2017; Manacorda, 2012; Ndaruhutse,2008; Arogo, 2017) while others argue that schools fail to achieve the objectives and goals of education (Koppensteiner, 2014; Chohan & Qadir, 2011; Chimombo, 2005; Taye, 2003; Dawit, 2003). Even though literature has reviewed the influence of school based factors on provision of FPE, most of these studies have been done in other parts of the country and regions whose strategic approach and financial footing is different from that of Dagoretti Sub-County. None of these studies focused on how these apply in the case of Dagoretti Sub-County. Therefore, it is evident that a literature gap exists on the influence of school-based factors on provision of FPE. This study therefore sought to fill the gap by focusing on the influence of school-based factors on provision of Free Primary Education in Dagoretti Sub-County.

2.5 Theoretical framework

This study was guided by the Education Production Function theory. The theory refers to all combinations of the inputs that produce any given set of outputs. It can also be explained as the relationship between school and pupil inputs and a measure of school output. The Education Production Theory was first developed by Coleman et al., (1966) report. The report showed that socio-economic factors are more important than school variables in explaining regional and racial differences in pupil achievement.

This model was criticized by other economists who developed the production model.

$$A = f(T, B, E \dots)$$

Where

A = Achievement

T = Teacher – pupil ratio

B = Book and other materials

E = Equipment

The Education Production Model was further advanced by Mace John in 1979. According to Mace, (1979), the theory refers to the output of education system in terms of graduation and completion rate which will depend on various factor inputs closely related to the quality and quantity of inputs especially in public primary schools and their performance there.

The education production model can be illustrated as below:

$$T_s = f(S, F, C, \dots) \text{ where}$$

T_s - is academic performance number of graduates

f – Function of

S = schooling factors

F = family background

C = students characteristics

The theory was relevant to the study because it addressed the interrelationship between the independent variables and the dependent variables in the study. The independent variables or the inputs in the study include: pupil-teacher ratio, physical facilities, teaching and learning materials and student automatic promotion policy in schools. The dependent variables or the expected outputs- academic achievement during the teaching and learning process are net enrolment of pupils, performance in KCPE examinations, promotion, repetition and dropout rates in schools. The literature review in some studies on the effect of pupil-teacher ratio on performance indicated that pupil-teacher ratio affects performance while others refute these findings. A review on the effect of physical facilities on academic achievement established that availability, adequate and efficient utilization of physical resources affects performance and participation of pupils in schools. The literature review on the effect of learning resources on performance revealed that effective teaching and learning is influenced by adequate, quality and a variety of relevant teaching materials which in turn affects students' academic performance in Kenya Certificate of Primary Education(KCPE). The studies conducted on the effect of students' automatic grade promotion on students' learning achievement revealed that the promotion policy in schools reduces repetition, increases survival and

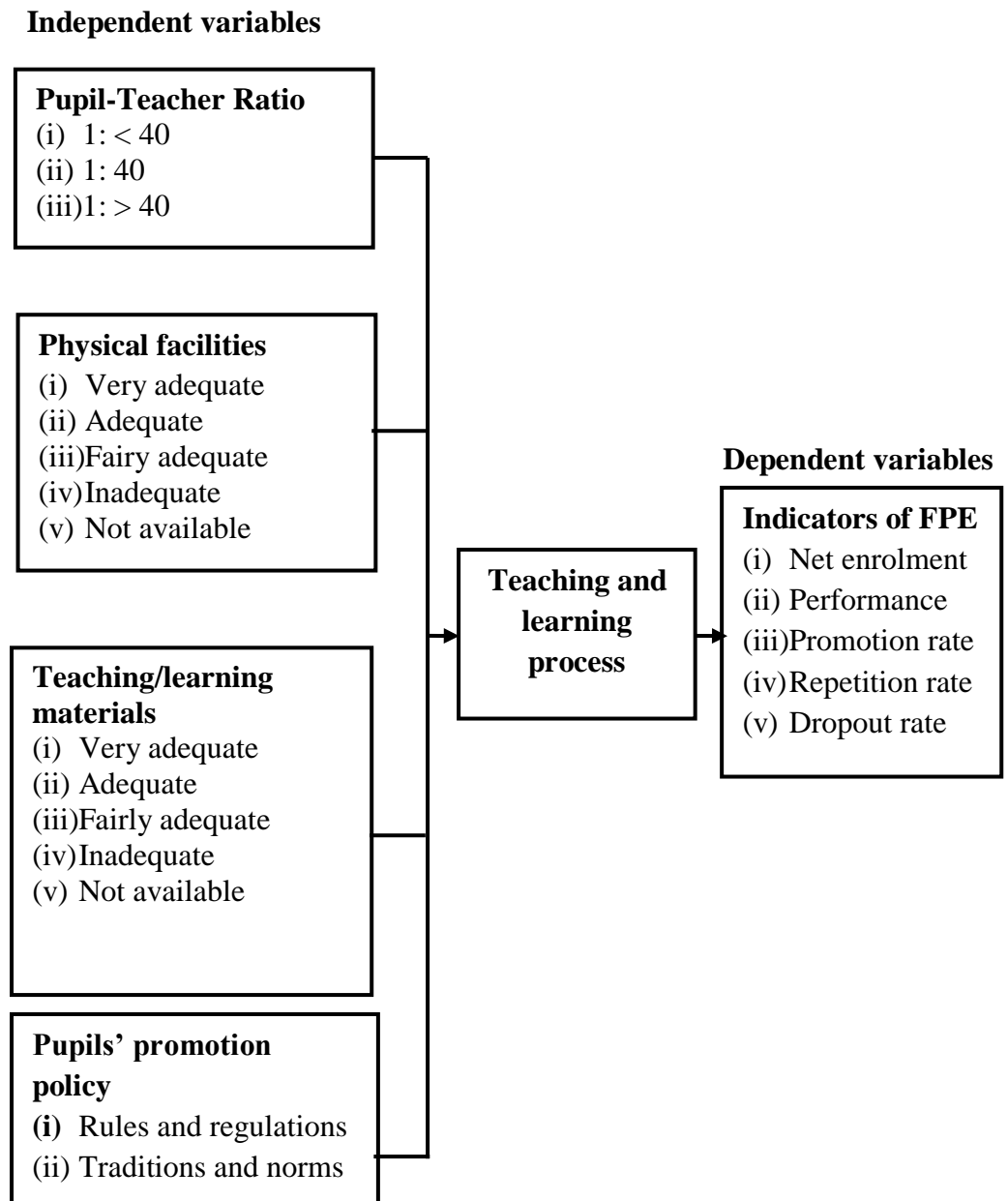
completion rates by reducing the number of school dropouts while others argue that schools fail to achieve the objectives and goals of education.

The studies that have been done are from other parts of the country and regions whose strategic approach and financial footing is different from that of Dagoretti Sub-County. None of these studies focused on how these apply in the case of Dagoretti Sub-County. Therefore, it is evident that a literature gap exists on the influence of school-based factors on provision of FPE. This study therefore sought to fill the gap by focusing on the influence of school-based factors on provision of Free Primary Education in Dagoretti Sub-County.

2.6 Conceptual framework

A Conceptual framework is a structure, graphical or narrative form arranged in a logical manner to provide a visual or a picture that display how variables under investigation relate to each other. Therefore, the conceptual framework of this study is illustrated in Figure 2.1

Figure 2. 1 Conceptual Framework on study variables



The conceptual framework shows the school-based independent variables which may influence the provision of FPE. These school-based factors include: pupil-teacher ratio, physical facilities, teaching-learning materials and students' grade automatic promotion policy. The way in which the independent variables and the dependent variables will interrelate during the teaching and the learning process in school, may have a positive or negative effect on the

dependent variables. The dependent variables are the main indicators of provision of Free Primary Education (FPE). They include: net enrolment, performance in KCPE examinations, promotion, repetition and dropout rates.

According to UNESCO (2006) and TSC (2006), the ideal PTR is 40:1. When the number of students exceed 40 per class, the learners will not get adequate attention due to the different individual needs among learners. In order to determine the PTR the following criteria was used: very adequate less 40:1; adequate 40:1; fairly adequate 50:1 and inadequate more than 60:1

The adequacy of physical facilities, teaching and learning resource materials for the learners will have a positive influence on provision of FPE while inadequacy of the same will have a negative influence on provision of FPE.

The students' automatic promotion policy will either have a positive or negative influence on provision of FPE depending on students' performance and participation.

If the pupil-teacher ratio, physical facilities, teaching and learning resource materials and pupils' automatic promotion policy would result to high pupil enrolment, good KCPE performance in examinations, better promotion, no repetition of pupils in classes and low pupil dropout rates, then the provision of Free Primary Education has a positive influence on teaching and learning process. Consequently, if the pupil-teacher ratio, physical facilities, teaching and learning materials and pupils' automatic grade promotion policy lead to low low pupils enrolment, poor performance in KCPE examinations, low promotion, high repetition of pupils in classes and high dropout rates, then the provision of Free Primary Education has a negative influence on teaching and learning process.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This Chapter consists of the research design, target population, sampling techniques and sample size, research instruments, validity of the instruments, reliability of the instruments, data collection procedures, ethical considerations and conclusions of data analysis techniques.

3.2 Research Design

The study used cross-sectional survey. This research design is often used to make inferences about the possible relationships or to gather preliminary data to support further research (Casley & Lury -(1987). The research design involves observing data from a given population at one specific point in time. The respondents in this type of study are selected based on particular variables of interest. The researcher records the information that is present in a given population without manipulating the variables. Cross-sectional survey design enables the researcher to collect data on different variables to see how they correlate with the critical variable of interest. This research design is economical, rapid in data collection, a researcher can collect data on multiple variables and prompts for further study. Therefore, the researcher considered Dagoretti Sub-County in terms of geographical region, the cost that was involved and the time that was required and found the research design appropriate.

The researcher sought to investigate the influence of school- based factors on provision of Free Primary Education in Dagoretti Sub-County.

3.3 Target Population

Orodho (2009) asserts that all items of people under consideration in any field constitute a target population. Dagoretti Sub-County had 16 public regular primary schools, 338 teachers and 3193 class eight pupils (Dagoretti Sub-

County Education Office, 2020). The class eight pupils were targeted because they were assumed to be having enough and relevant data required for this study since they had stayed in primary school for a longer period than the rest of the learners.

3.4 Sample Size and Sampling Procedure

Sampling is the process of selecting a sub set of cases in order to draw conclusions about the entire set, while a sample is a small part of a large population, which is thought to be representative of the large population (Orodho,2009). The heads of the institutions were purposely included in the study because they incharge of the schools. Since there were only 16 public regular primary schools in Dagoretti Sub-County, the study took all the head teachers by census. According to Norman and Fraenkel (2009), 10 percent of the population is adequate while Mugenda and (2003) indicates that for a large population, at least 20 percent of the population is a good representation hence the study took the higher sample. The study therefore sampled 20 percent of 338 teachers which translated to 68 teachers and used stratified sampling. Stratified random sampling was used to attain the desired representation of various subgroups in the population (Mugenda and Mugenda, 2003). Hence, to arrive at the number of teachers who participated in the study 68 teachers were divided by 16 schools to get 4 teachers per school. Twenty-six class eight pupils in every school were also randomly selected and involved in the study. This again translated to 415 pupils, which is 13 percent of the total number of class eight pupils in the universe. These sample sizes for teachers and students were deemed adequate for the study as Neuman (2000), points out that a sample size of 10 percent of the target population is large enough as long as it allows for reliable data analysis by cross tabulation and provide a desired level of accuracy in an estimated large population.

3.5 Research Instruments

During the study, the researcher used questionnaires to collect data from head teachers' (Appendix II), teachers (Appendix III) and students (Appendix IV) about the influence of school-based factors on provision of FPE. The head teachers', teachers and students' questionnaires were used because the respondents were able to read and write independently. The questionnaires for the head teachers, teachers and students were both structured and closed ended. Closed ended questions provided the respondents with options from which to choose a response. Some closed ended questions were phrased as statements which required responses. Observation checklists (Appendix V) were used in collecting data by way of own investigation, observation without interviewing respondents (Orodho, 2009). Document analysis guide (Appendix VI) was used to obtain data from class registers and admission registers on students enrolment, dropouts and repetition for 2013-2020 cohort in schools.

3.6 Validity of the instruments

Validity of instruments refers to the degree to which an instrument measures what it intends to measure. Orodho (2009) defines validity as the degree to which empirical measure or several measures of the concept, accurately measure the concept. This study therefore tested content validity of the questionnaires and observations schedule to determine whether it covered a representative sample of the behavior domain to be measured. The researcher identified the variables in the study and related them to the research questions, employed statistical procedures, used standards of validity and reliability in addition to consulting the supervisors to ensure that the questionnaires and the observation checklists measured what they ought to measure. The instruments were then be administered keenly by the researcher to avoid collecting invalid information.

3.7 Reliability of the Instruments

Reliability refers to the extent that the instrument gives the same results over several trials. Best and Kahn (2003) notes that reliability refers to the degree of consistency that the instrument or procedure demonstrates. Reliability can also be seen as the absence of errors of measurement or the accuracy or precision (Kerlinger, 2000).

The study used test-retest technique to determine the reliability of the questionnaires that were given to the respondents who were not included in the main study.

The answered questionnaires were administered to the same group after a period of two weeks and reliability statistics test was computed and a Cronbach's Alpha value of 0.7 was established of the research instruments. This implies that all research instruments were statistically accepted for this study as authorized by Kiess and Bloomquist (1985) that any value above 0.7 of study instruments is suitable for any study.

3.8 Data Collection Procedures

After obtaining a research permit from The National Commission of Science, Technology and Innovation (NACOSTI), the researcher sought clearance from Dagoretti Sub- County Education Office and all the school head teachers. The ethical standards were adhered to, the aim of the study was explained to the respondents and respondents consent was sought. The research instruments to be used in the study were administered in person.

The researcher gave the respondents enough time to fill in the questionnaires regarding the demographic background information and the influence of school-based factors on provision of FPE. Finally, the researcher collected the questionnaires from the respondents upon answering the questions. Alongside administering the questionnaires, the researcher also used observation checklists to observe the available physical, teaching and learning materials in the schools.

3.9 Data Analysis Techniques

The gathered instruments were validated, edited and coded (Mugenda & Mugenda, 2003). The quantitative data collected from the questionnaires were edited, coded and analyzed using Statistical Package for Social Science (SPSS) version 21 to inform on accuracy of results. The quantitative data was obtained from questionnaires, class registers and admission registers were used in document analysis to obtain data on enrolments, dropouts and repetition of pupils in schools. The observation check lists comprising of qualitative data were analyzed thematically in line with the objectives of the study. The data was presented using tables and graphs. In order to establish the relationship between the independent and dependent variables of the study, a Pearson Chi-Square Test was used at the 0.05 level of significance. The collected data was analysed to determine the influence of pupil-teacher ratio, physical facilities, adequacy of teaching and learning materials and to assess the extent to which students' grade promotion policy influence the provision of FPE.

3.10 Ethical Considerations

The researcher obtained the intended data out of an informed consent from the respondents through writing. The respondents were informed of the purpose and the significance of the study. The respondents were required not to write their names on the questionnaires. This was to ensure that the responses given would be confidential. The researcher protected the respondents from harm or injury while filling in the questionnaires. The respondents were to voluntarily participate in the study and were free to withdraw at their own volition at any stage of data collection.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATIONS

4.1 Introduction

This chapter discusses the analysis, presentation and interpretation of the study findings on the influence of school-based factors on provision of Free Primary Education in Dagoretti Sub County, Nairobi City County, Kenya. The target population in this study was 16 public regular primary school head teachers, 338 teachers TSC Office Dagoretti Sub-County and 3193 class 8 pupils in Dagoretti Sub-County. Since the public regular primary schools were not many, the study took all the 16 head teachers by census. The pupil respondents in the study were 415 which translated to 13 percent and 68 teachers which was 20 percent. The study took 26 class 8 pupils from each school who were selected through stratified random sampling, four teachers from each school selected through stratified random sampling and all the 16 head teachers in the public regular primary schools. The data collected from the respondents was processed using Statistical Package for Social Sciences (SPSS) version 21. All the themes discussing the same research questions were presented and analyzed together. The analysis of data was presented by use of tables and graphs.

4.2 Questionnaire Return Rate

The target respondents in the study were the head teachers', teachers' and the pupils' as illustrated in Table 4.1

Table 4. 1: Questionnaires Return Rate

Respondents	Sample size	Response rate	Return rate (%)
Head teachers'	16	16	100
Teachers	68	52	76.5
Pupils	415	393	94.7

According to Mugenda and Mugenda (2003) 50 percent of the returned questionnaires is an adequate representation of the study population. Basing on the questionnaire return rates, the questionnaires are sufficient enough to give a good representation of the study population.

4.3 Demographic Information of Respondents

The data for the study was collected from the sixteen (16) public primary school head teachers, sixty-eight (68) teachers and four hundred and fifteen (415) class eight pupils. The demographic information of the respondents was sought and analyzed in regard to gender, age of the pupils, level of education of teachers and the number of years the head teachers have stayed in their stations.

4.3.1 Gender Distribution of Respondents

The information on distribution of gender for all the respondents was sought to ascertain gender equality and empowerment of women which is one of the millennium development goals. The responses obtained were tabulated and the results are as shown in Table 4.2

Table 4. 2: Respondents Distribution by Gender

Gender	Male		Female	
	Frequency	Percent	Frequency	Percent
H/ Teachers'	8	50	8	50
Teachers	17	33	35	67
Pupils	189	48	204	52

Based on the findings of the study, there is equal distribution of head teachers in terms of gender within the sub county. A half of the schools are headed either by male or female head teachers. This may have an effect on how pupils perceive their role models e.g. institutions that are headed by male teachers provide encouragement to the boys who in turn strive hard to attain good

grades at the end of the year. Schools that are headed by female teachers give encouragement to the girls who in turn work hard to obtain good grades at the end of the year. In addition, results shows that there is unequal distribution of the teachers in terms of gender in schools. Majority of the teachers were females. This may disadvantage the boys who lack adequate male teachers to look up to as role models and therefore could have low motivation to work hard in school. On the other hand, Table 4.3 shows that female pupils are more as compared to their male counterparts. Therefore, these findings establish that there is gender imbalance for both teachers and pupils as compared to head teachers in Dagoretti Sub-County.

4.3.2 Academic Qualification of Respondents

Academic qualification was put into consideration for both head teachers and teachers as it may affect the performance of the pupils in the provision of free primary education for schools under investigation. Therefore, respondents were asked to indicate their academic qualification and the results are as presented in Table 4.3

Table 4. 3: Academic Qualifications of Respondents

Academic qualification	Head teachers		Teachers	
	Frequency	Percentage	Frequency	Percentage
M. Ed	3	18.7	1	1.9
B. Ed	13	81.3	13	25
Diploma	-	-	12	23.1
P1	-	-	26	50
Total	16	100	52	100

Table 4.3 indicates that there is unequal distribution of head teachers in relation to the head teachers' academic qualification. Majority of the head teachers have bachelors degree in education while a few head teachers have masters degree. This implies that highly qualified head teachers motivates pupils to work extra hard to improve on performance in examinations. However, lowly qualified head teachers due to lack of expertise negatively affect performance of the pupils and provision of free primary education in Dagoretti Sub County. Further, Table 4.3 shows that all the teachers teaching in the schools are trained. However, there is unequal distribution of teachers' in regard to academic qualification. Most teachers in schools were P1 teachers. The aspect of P1 teachers upgrading their education is likely to improve performance in their respective schools in Dagoretti Sub County.

4.3.3 Teaching Experience of Respondents

In regard to the number of years the head teachers and teachers have taken in their work stations the respondents responses were obtained and the information was analyzed and the results are as shown in Table 4.4

Table 4. 4: Teaching Experience of Respondents

Years	Head teachers		Teachers	
	Frequency	Percentage	Frequency	Percentage
Below 5	14	87.5	27	51.9
5-10	2	12.5	16	30.8
10-15	-	-	6	11.5
Over 15	-	-	3	5.8
Total	16	100	52	100

Table 4.4 indicates that majority of the head teachers have stayed in their current stations for a period of less than five years. A small number of head teachers have stayed in their schools for more than 5 years. The duration a head teacher stays in a particular institution is important because it determines how best he or she understands the challenges and threats to pupils wellbeing within that particular locality. The findings of this study concurs with a study by Ouma (2017) which also revealed that the duration of time an institutional head has taken in a school determines how well he or she understands the challenges and threats affecting pupils in a particular area.

With regard to the teachers, there is fair distribution of teachers in terms of the number of years they have stayed in their stations. The findings from the table reveal that most of the teachers have stayed in their current stations for a period of less than five years compared to the rest of the teachers. The duration the teachers have stayed in schools is of essence because it determines how best they understand the challenges and threats affecting the pupils within the area.

4.3.4 Distribution of Pupils by Age

The pupils' demographics was captured to understand their age distribution to establish the ratio of boys to girls accessing education within Dagoretti Sub County and determine the gaps that need to be addressed. The study sought to scrutinize information on class 8 pupils' in terms of age distribution in schools. Therefore, pupils were asked to indicate their ages. The intention was to establish whether there were pupils outside the official primary school age bracket of 6-13 years. The results are indicated in Table 4.5

Table 4. 5:Pupils Distribution by Age

Years	Frequency	Percentage
12-15	306	77.8
Above 15	87	22.2
Total	393	100

The information in Table 4.5 shows that the class 8 pupils were not within the same age category. Therefore, this implies that some pupils could have stayed in primary schools for more than eight years.

4.4 Influence of Teacher-pupil Ratio on Provision of FPE

According to TSC (2006) the recommended pupil-teacher ratio (PTR) in Kenya is 40: 1. However, since the introduction of Free Primary Education (FPE) in Kenya in 2003, pupil-teacher ratio (PTR) has gradually increased from the ideal 40: 1 to between 60: 1 and 90: 1 (MoEST, 2004). To assess how pupil-teacher ratio influences provision of FPE, the head teachers were asked to give their responses which are shown in Table 4.6

Table 4. 6 Head teachers’ Responses on PTR on Provision of FPE

High teacher-pupil ratios	Frequency	Percentage
Lowers performance	9	56.26
Poor service delivery	5	31.25
Undecided	2	12.50
Total	16	100

Table 4.6 shows that a good number of head teachers indicated that high pupil-teacher ratios in classes affects the learning outcomes. The findings of the study revealed that high pupil-teacher ratio makes it difficult for teachers to pay more attention to the needs of individual learners which may result in poor performance. A study by Huna (2005) also observed that teachers working in schools where pupil-teacher ratio is high are overworked and lack time to prepare their work. Muller and Hoffer (2015) in a study conducted in Illinois USA, also noted that the achievements of Mathematics scores relied on the size of the class enrolment. A study by Adino (2015) in Butere Sub-County on performance in Mathematics in KCSE also found out that teacher adequacy and quality are among the key variables that determine academic performance in Mathematics. She recommended that the government should employ more Mathematics teachers to improve on the student- teacher ratio. A study by Owaga (2013) on factors influencing internal efficiency of public primary schools in Suba West Division, Migori County, Kenya also found out that high number of pupils per teacher in class reduces the individual attention given to each learner. The study also noted that the teachers were overwhelmed and could not efficiently mark pupils work. This lowers the quality of service provided by the teachers.

Basing on the conventional guidelines laid by UNESCO (2006) on an ideal teacher pupil ratio, three mutually exclusive response categories for teacher to pupil ratio i.e., 1:< 40, 1:40 and 1: > 40; representing 1 to less than or equal to or more than ideal were generated by the researcher. The teachers were asked to indicate the number of pupils per class and the results are shown in Table 4.7

Table 4. 7 Teacher’s Response on Pupils-Teacher Ratio

Percent	Frequency	Percent
1:< 40	0	0
1:40	0	0
1:> 40	52	100

The findings in Table 4.7 shows that majority of teachers indicated that the pupils-teacher ratio exceed 40. The increased enrolments of pupils in schools is as a result of the pursuit for universal primary education and persistent teacher shortages in schools. This is a matter that is against the conventional guidelines recommended by UNESCO (2006) and TSC (2006) on an ideal teacher pupil ratio of 1: 40. More than 40 pupils per class affect the process of teaching and learning. This echoes the findings of a study done by Yelkpieri, Namale, Esia-Donkoh and Ofosu-Dwameng (2012) which noted that to some extent large class size affects student learning.

The teachers were also asked to give their responses on pupil-teacher ratio and performance in their schools during national examinations. The responses are shown in Table 4.8

Table 4. 8 Pupil-Teacher Ratio and Performance

PTR	High	Good	Low	Percentage
1: < 40	-	-	-	-
1: 40	-	10	-	19.3
1: > 40	-	-	42	80.7
Total				100

Table 4.8 shows that a number of schools in the sub county do not perform well. It’s evident that majority of the schools register low performance in

national examinations. This can be attributed to high pupil teacher ratios in classes. The findings of the study concur with those of Kaloki, Kasau, Kitoo and Kalai (2016) which also revealed that as pupil-teacher ratio increases the performance of pupils in national examinations decreases and vice versa. In addition, Wakoli (2016) also noted that teacher overload, tedious marking, processing of examinations, over enrolment of students, understaffing as well as unguarded student discipline contributes to poor performance in examinations.

The study sought information from teachers on pupil-teacher ratio for schools under scrutiny. The collected data was computed and results are presented as in Table. 4.9

Table 4. 9 Pupil-teacher Ratio on Provision of FPE

Class Category	N	Sum
Class size of class 1	52	207
Class size of class 2	52	206
Class size of class 3	52	207
Class size of class 4	52	206
Class size of class 5	52	207
Class size of class 6	52	205
Class size of class 7	52	202
Class size of class 8	52	202
Valid N	52	

Results in Table 4.9 demonstrate that pupil-teacher ratio across the classes from class one to eight exceeds the 1:40 ratio as per the recommendations of UNESCO (2006). This implies that pupils in Dagoretti Sub County are overcrowded across the classes.

Therefore, the study establishes that minimal teaching and learning is effectively taking place as per guidelines of UNESCO (2006). Hence, it negatively affects pupil's performance.

For instance, sharing of teaching/learning materials in a class is difficult for one teacher. Therefore, this is attributed to poor performance of pupils in Dagoretti Sub County.

Further, the study established whether there exists any relationship between pupil-teacher ratio and provision of Free Primary Education (FPE) by use of a Chi-Square test and the findings are as presented in Table 4.10

Table 4. 10 A Ch-Square Test between Pupil-Teacher Ratio and Provision of FPE

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.678 ^a	2	.712
Likelihood Ratio	1.151	2	.562
Linear-by-Linear Association	.592	1	.441
N of Valid Cases	41		

The results in Table 4.10 indicate that there exist no statistically significant relationship between pupil-teacher ratio and provision of FPE as indicated by P-Value > 0.05. The findings indicates that pupil-teacher ratio across the classes from class 1-8 is exceeds the recommended ratio of 40:1 , pupil-teacher ratio by UNESCO (2006) and TSC (2006). This implies that one teacher is supposed to teach one class of 40 pupils for effective learning and performance of the pupils.

Moreover, a cross-tubalation was computed between the KCPE performance verses the pupil-teacher ratios by number of streams in class 8 and the results are presented in Table 4.11

Table 4. 11 Cross-tabulation: KCPE performance vs. Pupil-teacher Ratios by Number of Streams in Class 8

		Pupil-teacher ratios by number of streams in class 8					Total
		1	2	3	4	5	
Above average	Count	1	0	2	0	3	6
	% of Total	6.3%	0.0%	12.5%	0.0%	18.8%	37.5%
Below average	Count	5	3	0	1	1	10
	% of Total	31.3%	18.8%	0.0%	6.3%	6.3%	62.5%
Total	Count	6	3	2	1	4	16
	% of Total	37.5%	18.8%	12.5%	6.3%	25.0%	100.0%

Inferred from Table 4.11, majority of the respondents across streams in class 8 indicated that KCPE performance was below average at 62.5 percent. compared to above average at 37.5 percent. The findings implies that streamed class 8 in schools scrutinized had low academic achievement. Therefore, pupil-teacher ratios in class 8 in streamed schools performed below average in the KCPE in Dagorreti Sub-County.

Further, these findings are in line with that of Chi-Square test (9.244a, df 4, Asymp.Sig.(2-sided,0.055)) which implied that there exists no statistically significant relationship between the pupil-teacher ratios and provision of FPE that was demonstrated by P-Value > 0.05 in Dagorreti Sub County. The findings revealed that pupil-teacher ratios across the streams in classes 8 exceeded the recommended ratio of 1:40, teacher-pupil by UNESCO (2006) and TSC (2006) hence attributed to low academic achievement in KCPE performance in Dagorreti Sub-County. According to UNESCO (2006) and TSC (2006), the ideal teacher-pupil ratio is 40: 1 which implies that one teacher to teach one class of 40 pupils for effective learning and performance of the pupils.

The findings of this study concur with a research by Muller and Hoffer (2015) in Illinois USA which observed that the achievements of Mathematics scores relied on the size of the class enrolment. The findings of this study also echo a study done by Yelkper, Namale, Esia-Donkoh and Ofosu-Dwameng (2012) which noted that to some extent large class size affects student learning. In addition, Manjanga, Nasongo and Sylvia (2010) also observed that classes with high number of pupils per teacher resulted in poor academic performance due to increased teacher workload. Therefore, pupil-teacher ratio influence the provision of FPE in Dagoretti sub-County.

4.5 Influence of Physical Facilities on Provision of FPE

Physical facilities in schools are fundamental for better learning environment, achievements and outcome of students. These facilities include: classes, desks, library, electricity, water, toilets and the playing field. The researcher requested the respondents to give their responses and findings are presented in Table 4.12.

Table 4. 12 Pupils’ Responses on the Availability of Physical Facilities

Facility	Adequate		Inadequate		Unavailable	
	F	%	F	%	F	%
Classrooms	20	5.1	369	93.9	4	1.0
Library	1	0.3	98	24.9	294	74.8
Desks	7	1.8	386	98.3	0	0
Playing field	368	93.7	25	6.4	0	0
Electricity	306	77.9	87	22.1	0	0
Clean water	83	21.1	310	78.9	0	0
Toilets	95	24.2	298	75.8	0	0

Table 4.12, indicates that there is unequal distribution of physical facilities in schools within the Sub-County. The findings of the pupils from Table 4.13 in general indicate that classrooms, desks, clean water and toilets are inadequate.

Further, majority of the pupils indicated that there are no functional libraries in schools. However, the playing grounds and electricity are adequate. The inadequacy of classrooms, desks, clean water, toilets and working libraries affect effective learning of pupils in schools.

The findings of this study support a study by Amanullah and Adeeb (2014) which also observed that physical facilities in which students learn are very important and without conducive environment, effective learning cannot take place. A study by Saeed and Wain (2011) also noted that physical facilities in schools are fundamental factors for better learning environment and achievements and outcome of students. Philippine Education for All (2015) also observed facilities such as classrooms, desks, appropriate class sizes among others increase learners' participation in schools. UNICEF and WHO (2018:8) also revealed that adequate water, sanitation and hygiene facilities in schools improve access to education and learning outcomes especially for girls, by providing a safe, inclusive and equitable learning environment for all learners.

The study also obtained information of teachers on availability of physical facilities in Dagoretti Sub-county. The responses are presented as in Table 4.13

Table 4. 13 Teachers' Responses on Availability of Physical Facilities

Facility	Adequate		Inadequate		Unavailable	
	F	%	F	%	F	%
Classroom	14	26.9	38	73.1	0	0
Desks	9	17.3	43	82.7	0	0
Library	6	11.5	30	57.7	16	30.8
Toilets	12	23.1	40	76.9	0	0
Water	12	23.1	40	76.9	0	0
Electricity	41	78.8	11	21.2	0	0
Playing field	33	63.5	19	36.5	0	0

Table 4.13 shows that the distribution of physical facilities in schools is unfair. Majority of the teachers indicated that classrooms, desks, water and toilets are

inadequate in schools. Concerning libraries in schools, majority of the teachers observed that libraries were inadequate in schools. However, a few teachers noted that the libraries were unavailable in schools.

The playing fields and electricity were adequate in schools. The inadequacy of classrooms, desks, clean water, toilets and working libraries affect effective learning of pupils in schools.

The findings of this study concur with a study by Amanullah and Adeeb (2014) which also observed that physical facilities in which students learn are very important and without conducive environment, effective learning cannot take place. Saeed and Wain (2011) also found out that physical facilities in schools are fundamental factors for better learning environment and achievements, and outcome of students. Philippine Education for All (2015) also observed facilities such as classrooms, desks, appropriate class sizes among others increase learners' participation in schools. UNICEF and WHO (2018:8) also observed that adequate water, sanitation and hygiene facilities in schools improve access to education and learning outcomes especially for girls, by providing a safe, inclusive and equitable learning environment for all learners.

The head teachers were asked to provide information on the availability of physical facilities in their schools. The results are as presented in Table 4.14

Table 4. 14 Head teachers’ Responses on Availability of Physical Facilities

Facility	Very adequate		Adequate		Fairly adequate		Inadequate	
	F	%	F	%	F	%	F	%
Classrooms	4	25.0	-	-	-	-	12	75.0
Library	-	-	-	-	-	-	-	-
Desks	1	6.3	-	-	-	-	15	93.8
Playing field	-	-	-	-	-	-	-	-
Electricity	2	12.5	12	75.0	1	6.3	1	6.3
Water	4	25.0	4	25.0	8	50	0	0
Toilets	-	-	-	-	-	-	-	-

Table 4.14 indicates that the distribution of physical facilities in schools is very unfair. Majority of the head teachers indicated that classrooms and desks were inadequate. However, half of the head teachers indicated that water was fairly adequate. Only 25 percent of the head teachers observed that clean water was both very adequate and adequate. The head teachers also observed that electricity was adequate in all the schools within the sub county. The inadequacy of physical facilities like classrooms, desks, clean water among other facilities affects pupils’ participation in schools.

A study by Philippine Education for All (2015) also observed that facilities such as classrooms, desks, and appropriate class sizes among others increase learners’ participation in schools. UNICEF and WHO (2018:8) also observed that adequate water, sanitation and hygiene facilities in schools improve access to education and learning outcomes especially for girls, by providing a safe, inclusive and equitable learning environment for all learners.

The study also sought pupils’ information on Physical Facilities on Provision of FPE. The responses are presented as in Table 4.15

Table 4. 15 Pupils’ Responses on Physical Facilities on the Provision of FPE

Response	Frequency	Percent
To a greater extent	160	40.7
To some extent	218	55.5
Not at all	15	3.8
Total	393	100

The findings in Table 4.15 indicate that physical facilities influence the provision of FPE. Most of the pupils observed that physical facilities influence the provision of FPE. The study findings shows that only 3.8 percent of the pupils indicated that physical facilities do not influence provision of FPE at all. Basing on the study findings, physical facilities encourage learners to attend schools. This is echoed in Philippine Education for All (2015) which also observed that physical facilities increase learners’ participation in schools. A study by UNICEF and WHO (2018 :8) also observed that physical facilities in schools improve access to education and learning outcomes especially for girls, by providing a safe, inclusive and equitable learning environment for all learners.

Head teachers were asked to provide responses on the extent physical facilities influence the provision of FPE. The responses were presented in Table 4.16

Table 4. 16: Head teacher’s Responses on Physical Facilities on the Provision of FPE

Facility	Adequate		Inadequate	
	F	%	F	%
Classroom	14	87.5	2	12.5
Library	0	0	0	0
Desks	12	75.0	4	25.0
Playing field	0	0	0	0
Electricity	2	12.5	14	87.5
Clean water	12	75.0	4	25.0
Toilets	12	75.0	4	25.0

Table 4.16 demonstrate that physical facilities in schools influence provision of FPE to some degree. Majority of the head teachers observed that classrooms, desks, clean, water and toilets influence the provision of FPE to a greater extent. Availability of electricity influences provision of FPE to some extent. Based on the study findings, physical facilities increase pupils’ participation in schools. The findings of this study concur with the findings of Amwayi and Mwalo (2014) on the effect of physical facilities on academic achievement in public day secondary schools in Kakamega East Sub County, Kenya which observed that inadequacy of physical facilities in schools resulted to low academic performance in the KCSE examinations.

Further, the study established whether there exists any relationship between Physical facilities and provision of Free Primary Education (FPE) by use of a Chi-Square test. The findings are presented as in Table 4.17

Table 4. 17 A Chi-Square Test on Relationship between Physical Facilities and Provision of FPE

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.000 ^a	12	.191
Likelihood Ratio	17.995	12	.116
Linear-by-Linear Association	1.575	1	.210
N of Valid Cases	16		

Results in Table 4.17 indicates that there is no statistically significant relationship between the physical facilities and provision of FPE as demonstrated by P-Value > 0.05. Therefore, the findings shows that physical facilities negatively influence the provision of FPE in Dagoretti Sub-County. The study findings concur with those of Limon (2016) and Chepkonga (2017) which also showed that inadequate learning facilities have a negative impact on provision of quality education in public ECDE schools in West Pokot County. The findings also support a study by Ochwada, Oseko and Murunga (2020) in Bungoma County, Kenya, on ‘Influence of physical facilities on the teaching and learning process in public primary schools’ which also revealed that inadequate classrooms negatively affected the teaching and learning in schools. However, a study conducted by Akomolafe and Adesua (2016) established a positive relationship between physical facilities and the students’ level of motivation and academic performance. This findings supports a study conducted by Bakari, Likoko and Ndinyo (2014) which also found out that the availability and utilization of physical facilities in schools encouraged students achieve better academic performance. A study conducted by Arshad, Ahmed and Tayyab (2019) also found out that the support facilities in schools significantly influenced academic achievement by about 15.8 percent. Barrett

and Treves (2019) also revealed that performance of the learners' is enhanced with better learning environments.

4.6 Influence of Adequacy of Teaching and Learning Materials on Provision of FPE

Teaching and learning materials are resources required by pupils and teachers to make the process of teaching and learning effective. These materials include the following: pupils course books, teachers' guide books, supplementary books, teaching aids, chalks, blackboards and computers. The researcher sought the views of the respondents and below is the findings.

The study sought information of pupils on adequacy of teaching and learning materials on provision of FPE. The responses are illustrated as in Table 4.18

Table 4. 18 Pupil's Responses on Adequacy of Teaching and Learning Materials on Provision of FPE

Facility	Adequate		Inadequate		Unavailable	
	F	%	F	%	F	%
Pupils' textbooks	94	23.9	299	76.1	0	0
Revision books	18	4.6	284	72.3	91	23.2
Teaching aids	15	3.8	365	92.9	13	3.3
Computers	71	18.1	0	0	322	82.0

The findings in Table 4.18 show that there is a shortage of teaching and learning materials in schools due to increased enrolments of pupils. Majority of the pupils noted that pupils' textbooks, supplementary books and teaching aids were inadequate. Concerning computers, majority of the pupils observed that computers were not available in their schools. For effective teaching and learning to take place in schools, teaching and learning materials ought to be adequate.

A study conducted by Munguti (2016) in Makueni County, Kenya on learning resources and students' academic performance in Geography established that there is a relationship between availability of learning resources for the teaching and learning of Geography in public schools in Makueni County and KCSE performance in the subject in the country. Therefore, inadequacy or absence of teaching and learning resources makes teachers handle content in an abstract manner. For effective teaching and learning, textbooks and other resource materials are necessary. This finding supports a study done in Kathiani Sub-County on school-based factors influencing students' performance where Musyoka (2018) indicated that teaching resources are critical in determining the academic performance of schools. Lyons (2012) also noted that teaching and learning resources facilitates learning of abstract concepts and ideas and discourages rote learning. Atieno (2014) also confirmed that inadequate teaching and learning resources in schools compromises education and this inevitably is reflected in low academic performance, high dropout rates, problem behaviors, poor teacher motivation and unachieved educational goals. A study by Laurillard (2013) also observed that lack of effective teaching and learning technologies in Botswana resulted to dismal student academic performance. Onyango (2008) observed that high number of pupils enrolled in schools after the introduction of Free Primary Education (FPE) by the government in Kenya has led to problems of pupil- textbook ratios, high pupil-teacher ratio and overcrowded classrooms which affect participation in public primary schools.

Moreover, teachers were asked to provide responses on adequacy of teaching and learning materials on provision of FPE. The results are presented as in Table 4.19

Table 4. 19 Teachers’ Responses on Adequacy of Teaching and Learning Materials on provision of FPE

Facility	Adequate		Inadequate		Unavailable	
	F	%	F	%	F	%
Pupils’ textbooks	18	34.6	34	65.4	0	0
Supplementary books	4	7.7	43	82.7	5	9.6
Teaching aids	7	13.5	43	82.7	2	3.8
Computers	27	51.9	25	48.1	0	0

The findings in Table 4.19 show that there is a shortage of teaching and learning materials in schools due to increased enrolments of pupils. Majority of the teachers noted that pupils’ textbooks, supplementary books and teaching aids were inadequate. In regard to computers, 52 percent of the teachers observed that computers were adequate while 48 percent indicated that computers were not available in their schools.

A study conducted in Hamisi Sub-County on analyzing the effect of teaching and learning resources on students’ academic achievement in public secondary schools Livumbaze and Achoka (2017) revealed that students receded academically at secondary schooling due to factors related to teaching and learning resources. This implies that for effective teaching and learning to take place in schools, teaching and learning materials ought to be adequate.

Musyoka (2018) also indicated that teaching resources are critical in determining the academic performance of schools. According to Lyons (2012) teaching and learning resources facilitates learning of abstract concepts and ideas and discourages rote learning. The findings by Atieno (2014) also found out that, inadequate teaching and learning resources in schools compromises education and this inevitably is reflected in low academic performance, high dropout rates, problem behaviors, poor teacher motivation and unachieved

educational goals. Onyango (2008) observed that high number of pupils enrolled in schools after the introduction of Free Primary Education (FPE) by the government in Kenya has led to problems of pupil- textbook ratios, high pupil-teacher ratio and overcrowded classrooms which affect participation in public primary schools. Head teachers' were also asked to provide responses on adequacy of teaching and learning materials on provision of FPE. The responses was illustrated as in Table 4.20

Table 4. 20 Head teachers' Responses on Adequacy of Teaching and Learning Materials on Provision of FPE

Facility	Adequate		Inadequate		Unavailable	
	F	%	F	%	F	%
Pupils' textbooks	2	12.5	14	87.5	0	0
Revision books	1	6.3	15	93.8	0	0
Teaching aids	5	31.3	0	0	11	68.8
Computers	6	37.5	10	62.5	0	0

Table 4.20 shows a shortage of pupils' textbooks and supplementary books in most of the schools due to increased enrolments. Majority of the head teachers observed that, pupils' textbooks and supplementary books were not enough. However, 69 percent of the head teachers indicated that the teaching aids were not available. Concerning computers, the head teachers observed that computers were inadequate. For effective teaching and learning to take place in schools, teaching and learning materials ought to be adequate.

A study by Momoh (2010) on the effects of instructional resources on students' performance in West Africa School Certificate Examinations (WASCE) also observed that learning resource materials have a significant effect on students' achievements since they facilitate the learning of abstract concepts and ideas. Atieno (2014) also observed that, inadequate teaching and learning resources in schools compromises education and this inevitably is reflected in low academic performance, high dropout rates, problem behaviors, poor teacher motivation

and unachieved educational goals. Onyango (2008) observed that high number of pupils enrolled in schools after the introduction of Free Primary Education (FPE) by the government in Kenya has led to problems of pupil- textbook ratios, high pupil-teacher ratio and overcrowded classrooms which affect participation in public primary schools.

The study also obtained information from pupils on the influence of teaching and learning materials on provision of FPE. The responses were presented as in Table 4.21

Table 4. 21 Pupils’s Responses on Teaching and Learning Materials on Provision of FPE

Extent of response	Frequency	Percentage
Strongly Agree	125	31.8
Agree	220	56.0
Undecided	23	5.9
Disagree	17	4.3
Strongly Disagree	8	2.0
Total	393	100

The findings on Table 4.21 indicate that pupils’ responses on the influence of teaching and learning materials on provision of FPE are not similar. Majority of the pupils agreed that teaching and learning materials have an influence on FPE. However, a very number of the pupils disagreed on the influence of teaching and learning materials on provision of FPE.

The findings of this study supports a study conducted by Ayodele and Ogbiye (2018) which revealed that the extent to which an educational institution attains her objective could be related to the educational resources utilized. A study conducted in Kathiani Sub-County by Musyoka (2018) on school based-factors influencing students’ performance in Kenya Certificate of Secondary Examination in public secondary schools also found out that teaching resources had a positive and significant relationship with students’ performance at

KCSE. The findings of this study also agrees with a study done in Nyeri Central Sub-County on influence of selected factors on academic performance of pre-school learners where Mureithi and Mwangi (2019) established that adequacy of teaching and learning resources had a strong positive influence on learners’ academic performance.

Head teachers’ were asked to respond to statements regarding the influence of teaching and learning materials on provision of FPE. The responses were presented in Table 4.22

Table 4. 22 Head teachers’ Statement on Teaching and Learning Materials on Provision of FPE

Facility	SA		A		N		D	
	F	%	f	%	F	%	F	%
Textbooks	2	12.5	14	87.5	0	0	0	0
Revision materials	3	18.8	13	81.3	0	0	0	0
Teaching aids	4	25.0	7	43.8	0	0	5	31.3
Computers and internet	4	25.0	10	62.5	1	6.3	1	6.3

Table 4.22 indicates that the head teachers’ responses on the influence of teaching and learning materials on provision of FPE are not similar in terms of distribution. Majority of the head teachers observed that pupils’ textbooks, supplementary books and computers and internet influence the provision of FPE. However, 44 percent of the head teachers agreed that teaching aids have an influence on FPE. For schools to perform better and increase participation of learners in schools, teaching and learning materials in schools should be adequate. A study conducted by Okongo (2015) in Nyamira North Sub-County on the effect of availability of teaching and learning resources on the implementation of inclusive education in pre-school centers revealed that

inadequate teaching and learning resources affected the implementation of inclusive education. The study findings concur with a study done in Belgut Sub-County where Kabwos, Moige and Omwenga (2020) also observed that unavailability and inadequacy of teaching and learning resources hinders proper implementation of inclusive education in public pre-schools.

Further, the study established whether there exists any relationship between teaching and learning materials and provision of Free Primary Education (FPE) by use of a Chi-Square test. The findings were presented as in Table 4.23

Table 4. 23 Chi-Square Test on Relationship between T/L Materials and Provision of FPE

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.667 ^a	12	.558
Likelihood Ratio	12.450	12	.410
Linear-by-Linear Association	1.474	1	.225
N of Valid Cases	16		

The findings in Table 4.23 indicates that there is no significantly statistical relationship between the availability of teaching learning materials and the pupils performance in KCPE as it is demonstrated by P-Value > 0.05. Therefore, the findings indicate that availability of teaching and materials negatively influence provision of FPE in Dagoretti Sub County.

4.7 Influence of automatic promotion policy on the provision of FPE

The Ministry of Education in Kenya advocates for 100 percent transition of pupils from one grade to the other. Pupils' in primary schools are supposed to

take duration of 8 years. This means that pupils are not supposed to repeat in any class or drop out of school. In the process of assessing the learners through formative evaluations, schools were found not practicing students' grade promotion policy as indicated by the findings as presented in Table 4.24

Table 4. 24 Pupils' Responses on repetition, withdrawal and dropouts.

Classes	Repetition	Withdrawal	Dropouts
1	12 (4.3%)	-	(0.5%)
2	24 (8.5%)	-	3 (4.5%)
3	29 (10.4%)	4 (8%)	2(3.2%)
4	32 (11.4%)	10 (20%)	7(11.4%)
5	35 (12.5%)	9 (18%)	9(14.7%)
6	50(17.8%)	14 (28%)	14(23%)
7	52 (18.5%)	13 (26%)	15(24.6%)
8	46(16.4%)	-	13(21.3%)
Total	280	50	63

Table 4.24 indicate that grade promotion policy is not fully adhered to in some schools within the sub county. During end of year examinations, some schools set a minimum mark that ought to be attained by learners for promotion to the next class. This implies that pupils who do not attain the pass mark set in their respective classes repeat. The findings from the study revealed that average grade repetition rates are minimal in lower classes and tend to increase in upper classes. The findings of Olenja (2017) also showed that the repeater rate was highest in class 7 with 14.54 percent. This is due to the belief that repetition in this grade will make pupils to improve on their performance in examinations. A study conducted earlier by Ogada (2014) also found out that repetition rate was highest in class seven in 2010 at 11.6 percent. However, the findings by Nyae (2012) revealed highest repeater rate in class eight at 24.58 percent.

A study done by Russell and Jarvis (2019) on student withdrawal, retention and their sense of belonging; their experience in their words also established that some students withdraw from institutions for a variety of inter-related reasons.

Some of the reasons are internal to the institutions and are related to quality of teaching, assessment feedback, consistent accurate communication and support mechanisms while others are external and include critical life moments such as ill health, bereavements, financial challenges and domestic responsibilities.

The findings from Table 4.24 also reveal that dropout rates are minimal in lower grades compared to upper classes. According to Basic Education Statistical Booklet (2014), high dropout rates were observed in the last two grades of primary cycle with class 7 and 8 recording 13.6 percent and 23.1 percent respectively.

Basic Education Statistical Booklet (2019) also revealed that retention rate of pupils from grade 1 to 6 is 96.1 percent while that of grade 1 to 8 is 81.9 percent. Therefore, the retention rate is higher with 6 years of primary schooling as compared to when the schooling goes for 8 years. The findings of this study agree with a study conducted in Nyatike Sub County on influence of school-based factors on internal efficiency in mixed public secondary schools where Ouma (2017) revealed that the government policy on automatic promotion of all students in classes was not adhered to by schools. This means that schools have their own students' grade to grade promotion policy. However, a study by Nyae (2012) showed that pregnancy, early marriages, drugs and substance abuse and child labour are the factors that lead to dropout. A study by Olenja (2017) also confirmed that poor performance, lack of parental support, lack of interest, indiscipline, peer group influence, sickness, teenage pregnancies and early marriages are other causes of school dropouts.

The study also sought to find out the responses of the teachers on pupils' automatic grade promotion policy and their responses are shown in Table 4.25.

Table 4. 255 Teachers' Responses on Pupils' Automatic Grade Promotion Criteria

Criteria	SA		A		U		D		SD	
	F	%	F	%	F	%	F	%	F	%
Promoted on passing	5	9.6	22	42.3	2	3.8	16	30.8	7	13.5
All are promoted	13	25	9	17.3	5	9.6	25	48.1	0	0
Based on rules	3	5.8	26	50.0	4	7.7	13	25.0	6	11.5
Traditions and norms	5	9.6	23	44.2	3	5.8	12	23.1	9	17.3

Table 4.25 shows that automatic grade promotion policy by the ministry of education in some schools is not automatic for all the learners. Schools have set out the criteria to use when promoting pupils' from one grade to the other.

The study findings observed that not all the pupils' are promoted to the next grade because promotions to the next class are pegged on passing of examinations. However, a few teachers disagreed on the view of promoting pupils upon passing exams. Concerning school rules, the study found out that for pupils to be promoted from one grade to the other, pupils should follow the set out school guidelines and rules. Also the study observed that some schools have got traditions and norms followed when promoting pupils to the next grade. The study findings support a study by Bushra, Samina and Qadir (2011) which also showed that a number of teachers did not regard automatic promotion policy as an effective educational practice. They therefore proposed some useful reform measures to improve the quality of primary education and

increase the efficiency of automatic promotion policy so as to achieve the universal primary education (MDG-2).

The study also sought the responses of the head teachers on the effect of pupils' automatic grade promotion policy on performance. The findings are presented in Table 4.26.

Table 4.26 Head teachers' Responses on Pupils' Automatic Grade Promotion Criteria.

Responses	SD		D		N		A		SA	
	F	%	F	%	F	%	F	%	F	%
Promoted on passing	-	-	13	81.3	-	-	2	12.5	5	6.3
All are promoted	1	6.3	0	0	0	0	14	87	1	6.3
Based on rules	1	6.3	0	0	0	0	15	93.8	0	0
Traditions and norms	0	0	1	1.6	0	0	9	56.3	6	37.5

Table 4.26 show that grade promotion policy in some schools is not automatic for the learners. In promotion, a few of the head teachers observed that not all the pupils' are promoted to the next grade. However, majority of the head teachers disagreed on the view of promoting pupils upon passing exams. Concerning school rules, majority of the head teachers indicated that for pupils to be promoted from one grade to the other, the pupils should follow the set out school guidelines and rules.

In terms of traditions and norms, 56 percent of the head teachers indicated that some schools have got traditions and norms followed when promoting pupils to the next grade. The findings of this study agrees with a study conducted by Chohan & Qadir (2011) which also revealed that students' automatic grade promotion policy negatively affects the overall quality of education since it

eliminates competition, demotivates the learners and teachers hence lowering teaching and learning outcomes.

The study also sought the teachers' responses on pupils automatic grade promotion policy on performance and the findings are presented in Table 4.27.

Table 4. 27 Teachers' Responses on Pupils' Automatic Grade Promotion Policy on Performance

Lowers performance	Frequency	Percentage
Strongly Agree	8	15.4
Agree	30	57.7
Undecided	5	9.6
Disagree	6	11.5
Strongly Disagree	3	5.8
Total	52	100

Table 4.27 indicate that teachers' have got different views on the effect of automatic grade promotion policy on performance. In terms of performance, majority of the teachers agreed that grade promotion policy lowers performance. However, few teachers strongly disagreed that grade promotion policy lowers performance of pupils in schools. Based on the study findings, pupils' automatic grade promotion policy lowers the quality of education given to some extent in public primary schools. The findings of this study agrees with a study conducted by Koppensteiner (2014) evidence from Brazil which showed that automatic promotion significantly reduces academic achievement measured by math test scores of fourth graders by 6.7 percent of a standard deviation.

In addition, the head teachers were asked to provide information on effects of grade promotion policy on pupils' performance. Responses are presented in Table 4.28

Table 4. 28 Head teachers’ Responses on Pupils’ Automatic Grade Promotion Policy on Performance

Lowers performance	Frequency	Percentage
Strongly Agree	2	12.5
Agree	11	68.8
Undecided	0	0
Disagree	3	18.7
Strongly Disagree	0	0
Total	16	100

Table 4.28 indicates that the head teachers’ have got different views on the effect of automatic pupils grade promotion policy on performance. In terms of performance, majority of the head teachers agreed that grade promotion policy lowers performance. However, the study findings showed that few head teachers disagreed that grade promotion policy lowers performance of pupils in examinations. Therefore, to some extent, automatic pupils’ grade promotion policy lowers the quality of education given in public primary schools. The findings of this study agrees with a study done by Lyonga (2020) which revealed that the policy of collective promotion among pupils negatively affects the attainment of literacy, numeracy and essential life skills. A study conducted in Cameroon by Nalova (2016) on promotion in English Speaking Primary Schools also revealed that automatic promotion results to inability to read and write among primary school pupils. The findings of this study also supports a study by Koppensteiner (2014) evidence from Brazil which also revealed that automatic promotion significantly reduces the academic achievement measured by math test scores of fourth graders by 6.7 percent of a standard deviation.

The study also sought the views of teachers’ on pupils’ automatic grade promotion on the objectives and goals of education in schools. The responses are illustrated as in Table 4.29

Table 4. 29 Teachers’ Responses on Pupils’ Automatic Grade Promotion Policy on the Objectives and Goals of Education in Schools

Schools fail to achieve goals and objectives	Frequency	Performance in %
Strongly Agree	1	1.9
Agree	25	48.1
Undecided	3	5.8
Disagree	19	36.5
Strongly Disagree	4	7.7
Total	52	100

Table 4.29 indicates that teachers have got different views on the effect of grade promotion policy on the objectives and goals of education in schools. Based on the findings, majority of the teachers indicated that pupils’ grade promotion policy makes schools to fail to achieve the objectives and goals of education. Only 8 percent of the teachers strongly disagreed that pupils grade promotion policy makes schools fail to achieve the objectives and goals of education. Hence, to some extent, pupils’ grade promotion policy makes schools to fail to achieve the objectives and goals of education in schools.

The findings of this study supports a study conducted by Teye (2003) which revealed that automatic promotion practices for the pupils makes schools to fail to achieve the objectives and goals of education. A study by Chimombo (2005) on Quantity Versus Quality in Education: Case Studies in Malawi also confirmed that automatic grade promotion policy makes schools fail to achieve the objectives and goals of education.

Further, the study established whether there exists any relationship between grade promotion policy and provision of Free Primary Education (FPE) by use of a Chi-Square test. The findings are presented as in Table 4.30.

Table 4. 30 Relationship between Automatic Grade Promotion Policy and Provision of FPE

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	32.000 ^a	24	.127
Likelihood Ratio	26.605	24	.323
Linear-by-Linear Association	.151	1	.698
N of Valid Cases	16		

The results in Table 4.30 indicate that there is no statistically significant relationship between automatic grade promotion policy and provision of FPE as illustrated by P-Value > 0.05. Therefore, the finding shows that grade promotion policy negatively influences provision of FPE in Dagoretti Sub-County.

The findings of this study concur with other studies that have been done which shows that students' automatic grade promotion policy by the Ministry of Education in schools negatively affects the overall quality of education since it eliminates competition, demotivates the learners and teachers hence lowering teaching and learning outcomes (Koppensteiner, 2014; Taye, 2003; and Chohan & Qadir, 2011). Larsen and Valant (2018); Manacorda, 2012; Mariano, Martorell and Berglund (2018); Eren, Ozkan and Depew (2017) noted that grade retention policies have negative impacts on students in the 8th grade. A study by Mariano et al. (2018) established that there is no evidence of the effect of retention on dropout found by Eren et al. (2017) for 4th graders in Louisiana but the negative effects on credits and highest grade attained differ from the null effects for Florida 3rd graders as Schwerdt et al. (2017) showed in their study. Students' automatic grade promotion policy negatively affects the overall quality of education since it eliminates competition, demotivates the

learners and teachers hence lowering teaching and learning outcomes (Koppensteiner, 2014; Taye, 2003; and Chohan & Qadir, 2011)

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a summary of the findings of the study and presents conclusions, recommendations and suggestions for further research.

5.2 Summary of the study

The purpose of the study was to investigate the influence of school-based factors on provision of Free Primary Education in Dagoretti Sub-County, Nairobi, Kenya. The school-based factors included: pupil-teacher ratio, physical facilities, teaching and learning materials and automatic students' grade promotion policy as they influence the provision of FPE in public primary schools.

The target population in this study was 16 public regular primary school head teachers, 338 teachers TSC Office Dagoretti Sub-County and 3193 class 8 pupils in Dagoretti Sub-County. The sample size comprised of 483 respondents; 16 school head teachers, 52 teachers and 415 pupils. The study adopted a cross-sectional survey research design. The researcher used questionnaires, document analysis and observation checklists to gather data for the study. The questionnaires were administered to head teachers, teachers and pupils. The study findings established that there exists no statistically significant relationship between pupil-teacher ratio, physical facilities, teaching and learning materials and automatic grade promotion policy on the provision of Free Primary Education.

5.3 Conclusion

Based on the findings, the study concludes that there is no statistically significant relationship between pupil-teacher ratio and provision of FPE in Dagoretti Sub County. The number of pupils across the classes was higher than the recommended pupil-teacher ratio. Therefore, pupil-teacher ratio negatively

influences the provision of FPE. There is no statistically significant relationship between the physical facilities on provision of FPE. The findings of the study revealed that inadequacy of physical facilities in schools negatively influence the provision of FPE in Dagoretti Sub-County. Concerning the adequacy of teaching and learning materials in Dagoretti Sub County schools, the findings shows that there is no statistically significant relationship between availability of teaching learning materials and the pupils performance in KCPE. This implies that the inadequacy of teaching and learning materials negatively influence provision of FPE in Dagoretti Sub county. Automatic grade promotion policy by the Ministry in public primary schools has no statistically significant relationship on provision of FPE. Further, the automatic promotion policy by the Ministry of Education in schools negatively influences the provision of FPE in Dagoretti Sub-County.

5.4 Recommendations

The following recommendations are suggested on the influence of school-based factors on provision of Free Primary Education (FPE).

- (i) There is need for the teachers' service commission (TSC) to employ more teachers in the sub county. This will ensure that an ideal teacher- pupil ratio is attained in schools to improve on the performance of the pupils.
- (ii) The physical facilities in schools such as classrooms, desks, libraries, playing grounds, electricity, clean water and toilets ought to be adequate for effective learning.
- (iii) The government should increase capitation in public primary schools in order for schools to buy adequate teaching and learning materials such as pupils' textbooks, supplementary books, teaching aids and computers.
- (iv) The policy on automatic students' grade promotion by the ministry of education is not fully implemented in some schools. Repetition of some low achievers in classes makes other pupils to drop out of

schools. All pupils in schools should be promoted from one grade to the other regardless of their performance in examinations.

5.5 Suggestions for further Studies

Based on the findings of the study, the researcher makes the following suggestions for further research in order to complement this study;

- (i) A similar study could be replicated to private primary schools in Dagoretti Sub County.
- (ii) The study suggests that an in-depth could be carried out on the influence of school-based factors on provision of Free Primary Education in Kenya, covering a wide geographical region like a county or the whole country.
- (iii) This study was delimited on the influence of school-based factors on provision of Free Primary Education in Dagoretti Sub County. It is suggested that a study could be done on the influence of socio-economic factors on provision of Free Primary Education in the sub county.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Zablon Masongo Orangi

Department of Educational
Administration and Planning,
University of Nairobi,
P.O. Box 92, KIKUYU.

The head teacher,

_____ Primary School,

Dagoretti Sub County.

Dear Sir/Madam

REF: RESEARCH PROJECT

I am a post graduate student in the Department of Educational Administration and Planning, University of Nairobi. I am carrying out a research on *“Influence of School-based Factors on Provision of Free Primary Education in Dagoretti Sub County, Nairobi City County, Kenya.* I humbly request you to assist me to achieve this goal by allowing me to select your school as one of my study sample. The questionnaires will be used in this research and the findings will be purely academic. All the respondents will be treated confidentially.

Thank you in advance.

Yours faithfully,

Orangi Zablon Masongo

APPENDIX II: QUESTIONNAIRE FOR HEAD TEACHERS

INSTRUCTIONS

You are requested to answer all the questions by filling in the blank spaces or tick where necessary. The responses are meant for the research purpose.

Section A: Demographic background information

1. What is your gender? Male () Female ().
2. What is your highest academic level of training? P1 () Diploma () B.Ed () M.Ed () others specify _____
3. For how long have you been the head teacher of this school? Below 5 years () 5-10 years () 10-15 years () Over 15 years ()
4. In which year was your school established? _____
5. Indicate the type and category of your school.
 - i. Type _____
 - ii. Category _____
6. What is the total population of pupils in the school this year?

7. Kindly indicate the number of streams in each class.

Class	1	2	3	4	5	6	7	8
Streams								

8. Please indicate the number of pupils' enrolled and those that were promoted in your school.

Class	1	2	3	4	5	6	7	8
Enrolment 2019								
Promoted 2019								

9. Indicate the number of boys and girls that were promoted in your school in the year 2019.

	1	2	3	4	5	6	7	8
Boys								
Girls								
Total								

10. How many pupils repeated classes in your school in the year 2019?

	1	2	3	4	5	6	7	8
Boys								
Girls								
Total								

11. The number of pupils who dropped out of school in the year 2019?

	1	2	3	4	5	6	7	8
Boys								
Girls								
Total								

12. Indicate the KCPE mean scores in your school for 2018-2019.

YEAR	KCPE MEAN SCORE
2018	
2019	

Section B: Influence of pupil-teacher ratio on provision of FPE

13. How many streams are there per class in your school?

One [] Two [] Three [] Four [] More than Five []

14. Kindly indicate the average number of pupils per class?

Below 40 () 40-50 () 51-60 () Above 60 ()

15. Kindly indicate the total number of teachers in school. _____
16. Are you able to look at pupils work with ease? Yes () No ()
17. If no in explain your answer. _____
- _____

18. Explain how pupil-teacher ratio influences provision of FPE

Section C: Influence of physical facilities on provision of FPE

19. Kindly indicate the availability of physical facilities in your school in the table below:

Facility	Very Adequate	Adequate	Fairly adequate	Inadequate	Not Available
Classes					
Desks					
Electricity					
Water					

20. Use a tick to indicate the extent to which the following physical facilities influence the provision of FPE in your school in the table below.

Facility	To a greater extent	To some extent	Not at all
Classes			
Desks			
Electricity			
Water			
Toilets			

Section D: Adequacy of teaching and learning materials on provision of FPE

21. Indicate using a tick the availability of teaching and learning materials in your school.

Teaching and learning materials	Adequate	Inadequate	Not available
Textbooks			
Revision materials			
Teaching aids			
Computers			

22. Tick the extent to which you agree the following learning resource materials affect performance in examinations on a scale of strongly agree to strongly disagree.

Teaching/ Learning Materials	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Course books					
Revision books					
Teaching aids					
Computers and internet					

Section E: Influence of students' grade promotion policy on provision of FPE

19. Kindly indicate the extent to which you agree with the following statements with regard to students' grade promotion policy on a scale of strongly agree to strongly disagree.

Students' grade promotion policy	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Promotion is based on passing exams					
All pupils are promoted					
Promotion based on rules and regulations					
Traditions and norms are followed					

23. Use a tick to indicate the effect of students' grade promotion policy on the objectives and goals of education.

Effect of pupils' grade promotion policy	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Lowers performance					
Schools fail to achieve objectives and goals of education					

Thank you for your cooperation.

APPENDIX III: QUESTIONNAIRE FOR TEACHERS

Answer all questions by filling in the blanks or ticking where necessary.

All your responses are meant for the purposes of research.

Section A: Demographic background information

1. What is your gender? Male () Female ()
2. Indicate your age bracket. Below 30 years () 30-40 years () 40-50 years () Over 50 years ()
3. Which is your highest academic qualification? P1 () Diploma () B.Ed () M.Ed ()
4. For how long have you worked as a teacher? Below 5 years () 5-10 years () 10-15 years () Over 15 years ()
5. For how many years have you worked in this school?
6. Below 5 years () 5-10 years () 10-15 years ()
7. Over 15 years ()
8. Indicate the number of streams per class in the school.

Class	C1	C2	C3	C4	C5	C6	C7	C8
Number of streams								

Section B: Influence of pupil-teacher ratio on provision of FPE

9. Please indicate the class size in terms of the number of pupils per class.

Classes	Below 40	40-50	51-60	Above 60
Class 1				
Class 2				
Class 3				
Class 4				
Class 5				
Class 6				
Class 7				
Class 8				

10. Kindly indicate by use of a tick the pupil-teacher ratio and performance in your school.

Pupil-Teacher Ratio	High Performance	Good Performance	Low Performance	No Effect
Low pupil teacher ratio				
Adequate pupil teacher ratio				
High pupil-teacher ratio				

Section C: Influence of physical facilities on provision of FPE

11. Indicate the adequacy of the following physical facilities in your school.

Facility	Adequate	Inadequate	Not available
Classes			
Desks			
Library			
Toilets			
Water			
Electricity			
Playing field			

12. Indicate the extent to which the following physical facilities influence the provision of FPE.

Facility	To a great extent	To some extent	Not at all
Classes			
Desks			
Library			
Toilets			
Water			
Electricity			
Playing field			

Section D: Adequacy of teaching and learning materials in provision of FPE

13. Indicate the availability of teaching and learning materials in your school.

Teaching and learning materials	Adequate	Inadequate	Not available
Course books			
Supplementary books			
Teaching aids			
Computers			

Section E: Influence of students’ grade promotion policy in provision of FPE

14. Kindly indicate the extent to which you agree with the following statements with regard to students’ grade promotion policy on a scale of strongly agree to strongly disagree.

Students’ promotion policy	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Promotion is based on passing exams					
All pupils are promoted					
Promotion based on rules and regulations					
Traditions and norms are followed					

15. Use a tick to indicate the effect of students’ grade promotion policy on the objectives and goals of education in your school.

Effect of grade promotion policy on:	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Lowers performance					

Schools fail to achieve objectives and goals of education					
-----------------------------------------------------------------------	--	--	--	--	--

Thank you for your cooperation.

APPENDIX IV: QUESTIONNAIRE FOR STUDENTS

Kindly tick in the boxes of your choice in the corresponding parts of the questionnaire. This study is purely for academic purposes. All the answers will be confidential. Please do not write your name or the name of your school.

1. What is your gender? Male () Female ()
2. What is your age?
Between 12-15 () 15-17 () above 17 years ()
3. How many pupils are you in your class this year (2020)? _____
4. How many of your classmates have repeated any class since joining class one?
5. Kindly indicate the extent to which you agree that pupil-teacher ratio influences performance in examinations? To a greater extent () To some extent () Not at all ()
6. Tick appropriately against each of the following facility in your school.

Facilities	Adequate	Inadequate	Unavailable
Classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Desks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Playing field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electricity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clean water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toilets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Indicate the extent to which the physical facilities influence the provision of FPE.
8. To a greater extent () To some extent () Not at all ()
9. Kindly indicate the availability of teaching and learning resource materials in school?

T/L resources	Adequate	Inadequate	Unavailable
Course books			
Supplementary books			
Teaching aids			
Computers			

10. Tick the extent to which you agree teaching and learning materials influence the provision of FPE
11. Strongly agree () Agree () Undecided () Disagree () Strongly Disagree ()
12. 10. Accessibility of the school: accessible () Not easily accessible ()
13. Indicate what happens to pupils' who are not promoted in your school in the table below.

Repeat	Transfer school	Drop out of school

Thank you for your cooperation.

APPENDIX V: OBSERVATION CHECKLIST


This observation schedule will help the researcher to collect the information about the physical facilities in the sampled primary schools in Dagoretti Sub County.


1. Location and accessibility of the school? Good () Bad ()
2. Number of classrooms in the school? Very adequate () Adequate ()
Fairly adequate () Inadequate () Not available ()
3. Pupil –textbook ratio? Very adequate () Adequate () Fairly
adequate()
Inadequate () Not available ()
4. Pupil-desk ratio? 1:2 () 1:3 () More than 1:3 ()
5. Number of latrines in the school for
Teachers () boys () girls ()
6. Types of latrines in the school?
Pit-latrines () flash ()
7. The conditions of the school library?
Good () bad () worse ()
8. Number of playing pitches in the school?
Football () netball () volleyball ()
9. The source of power in the school?
Electricity () generator () solar ()

APPENDIX VI: DOCUMENT ANALYSIS GUIDE

Year	Class	No. of students enrolled	No. of students
2013	1		Repeaters ()
			Dropouts ()
			New students ()
2014	2		
2015	3		
2016	4		
2017	5		
2018	6		
2019	7		
2020	8		

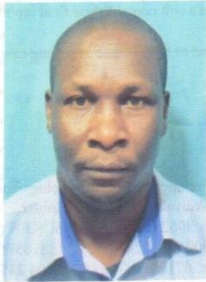
APPENDIX VII: RESEARCH PERMIT


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: 248168 Date of Issue: 30/March/2021


RESEARCH LICENSE




This is to Certify that Mr. ZABLON MASONGO ORANGI of University of Nairobi, has been licensed to conduct research in Nairobi on the topic: INFLUENCE OF SCHOOL BASED FACTORS ON PROVISION OF FREE PRIMARY EDUCATION IN DAGORETTI SUB-COUNTY, NAIROBI CITY COUNTY, KENYA for the period ending : 30/March/2022.

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248168
Applicant Identification Number


Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

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**COUNTY COMMISSIONER
NAIROBI COUNTY**
P. O. Box 30124-00100, NAIROBI
TEL: 341666

31/3/2021

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APPENDIX VIII: LETTER OF AUTHORIZATION



Republic of Kenya
MINISTRY OF EDUCATION

STATE DEPARTMENT OF EARLY LEARNING AND BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
cdenairobi@gmail.com

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

When replying please quote

Ref: RDE/NRB/RESEARCH/1/65 Vol.1

DATE: 31st March, 2021

Mr. Zablon Masongo Orangi
University of Nairobi
NAIROBI.

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on the topic: *"Influence of School Based Factors on Provision of Free Primary Education in Dagoretti Sub-County, NAIROBI, Kenya."*

This office has no objection and authority is hereby granted for a period, ending 30th March, 2022 as indicated in the request letter.

Kindly inform the Sub County Director of Education of the County you intend to visit.

OBIERO J. O
REGIONAL DIRECTOR OF EDUCATION
NAIROBI.



Copy to: Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI.



MINISTRY OF EDUCATION, SCIENCE & TECHNOLOGY

State Department of Early Learning and Basic Education



SUB-COUNTY DIRECTOR OF
EDUCATION

DAGORETTI SUB-COUNTY

P.O BOX 30124-00100

NAIROBI

Email: deo.dagoretti@gmail.com

Telegrams.....

Telephone.....

6th April, 2021

Ref: DAGO/EDU/SCH/01/04/21

ALL HEADTEACHERS

DAGORETTI SUB-COUNTY

RE: RESEARCH AUTHORIZATION-ZABLON MASONGO ORANGI

This is to introduce the above named person to you for the above mentioned purpose.

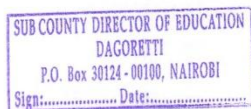
He is hereby authorized to visit your schools as per the attached authorization documents.

Kindly assist him.

Raphael N. Musyoki

Sub-County Director of Education

Dagoretti



APPENDIX IX: MAP OF THE STUDY LOCATION

DAGORETTI SUB COUNTY

Dagoretti Sub County is located at latitude :- 1° 17' 60.00" S and longitude 36° 45' 59.99" E

