MERIT RESEARCH JOURNALS
www.meritresearchjournals.org

Merit Research Journal of Education and Review (ISSN: 2350-2282) Vol. 4(4) pp. 036-047, April, 2016
Available online http://www.meritresearchjournals.org/er/index.htm

Original Research Article

Effects of Capitation Grant on Implementation of Free Primary Education in Kenya

Owuor Margaret Juma[1*], Gudo Calleb Owino[2] and Onditi Mary Anyango[3]

[1]Masters student in the School of Education, Department of Curriculum Studies and Education Management, Jaramogi
Oginga Odinga University of Science and Technology, Kenya.

[2]Lecturer, Department of Psychology and Educational Foundations, Jaramogi Oginga Odinga University of Science and Technology, Kenya

[3]Lecturer, Department of Curriculum Studies and Education Management, Jaramogi Oginga Odinga University of Science and Technology, Kenya

***Corresponding Author's Email: margret_juma@yahoo.com**

Abstract

Provision of primary education for all children has long been seen as of great importance, at least in policy discussions, around the world and in Kenya. Since the introduction of free primary education, the Kenyan government has continued to invest heavily on the program for its sustainability and realization of the UN Millennium Development Goals and the Education for All goals. It is important to understand the extent to which this capitation grant has affected service delivery in primary schools. The purpose of the study was to investigate the effects of capitation grant on implementation of free primary education in Seme Sub-county, Kenya. The study reviewed various literatures on some past studies and assessed their contribution to the objectives of this study. The study used descriptive survey design to carry out the study with both qualitative and quantitative methodologies of collecting data. The study sample comprised of 86 head teachers, who were selected purposively and proportionately while 269 teachers were selected through simple random sampling technique. Teachers were given questionnaires, while head teachers were also interviewed. Both quantitative and qualitative data were obtained from these respondents. Quantitative data from questionnaires were analysed by descriptive statistics as well as Pearson correlation test with the help of SPSS version 22 to compute the data, while qualitative data were analysed thematically through content analysis in the thematic analysis. The study found that that over three quarters of the respondents confirmed that because of capitation grant, school dropout rate had dropped significantly. Improvement of the enrolment rate was also reported by majority of the respondents who strongly agreed with the statement. More than half of the respondents also confirmed that because of capitation grant, school retention rate has improved significantly. Pearson correlation test also showed a strong positive correlation between FPE capitation grant and pupils enrolment rate of the selected schools in Seme Sub-County, with $r = 0.723$ at $P<0.05$. On academic performance, the study revealed that the KCPE performance of pupils in Seme sub-county had been on the upward trend, since 2002, with the highest mean score and highest score achieved being 379 and 410 respectively, registered in the year 2014. The increasing performance could be traced to 2003 that was when the FPE capitation grant was incepted. Head teachers also reported during interview that introduction of capitation grant led to improved performance in KCPE. Pearson Correlation test also shows a strong positive correlation between capitation grant and KCPE performance of the selected schools in Seme sub-county, with $r = 0.843$ at $P<0.05$. The study recommends that the amount for capitation should be adjusted upwards to enable the schools offer conducive environment. Parents should be encouraged to supplement the school budget where necessary for smooth running of the school and together with the capitation grant, the school would afford adequately teaching and learning materials that would encourage learning and better academic performance. Further research should be done on management factors affecting proper utilization of capitation grant on implementation of free primary education.

Key words: Academic Performance, Capitation Grant, Free Primary Education, Retention Rate

INTRODUCTION

Most of the governments globally have invested heavily in education policies promoting universal education for all, United Nations Millennium Development Goals which aimed to achieve universal primary education by the year 2015; Kenya has not been left behind in her endeavors to achieve these goals (Republic of Kenya 2007). For instance, Free Primary Education Capitation in Kenya began in 2003 it abolished all levies charged at public primary schools, created learning opportunities for many poor children who in the past could not access education due to the user charges and hitherto, the government and other education stakeholders have continued to spend hugely on the sustainability of the policy. In 2010, over 17 per cent of government's expenditure went to education (Ministry of Education Science and Technology, 2013).

The Kenya National Bureau of Statistics reported this figure as 13.5 per cent in 2011. This is a sizeable investment and a reflection of the realization of the crucial role that education or human capital plays in the development 'process. In 2012, to meet the commitment, the Government earmarked Kshs.5.4 billion from its budget which was reallocated for implementation of Free Primary Education (FPE). A further Kshs.4 billion was raised from the external partners who support education in Kenya. The capitation policy in the country is committed to ensuring renovation of classrooms ,building of toilets ,repair and maintenance, and improvement of physical facilities (good infrastructural learning facilities) , adequate number of non teaching staff, availability of text books and supplementary readers, textbook maintenance, exercise books, teachers' guides, reference materials, activity fee, stationary, assessment and examination, local transport and travelling, electricity, water and conservancy, telephone box, rental and postage, environment and sanitation, capacity building and meetings, contingencies, science and applied technology and ICT infrastructure materials (Ministry of Education, 2015). Despite the fact that the government is committed to this investment, it is not very clear how it affects the implementation of free primary education. The present study therefore sought to investigate effects of capitation grant on implementation of free primary education in Seme Sub-County.

Problem Statement

Provision of Primary Education for All children has long been seen as of great importance, at least in policy discussions, around the world and particularly in Kenya. Since the introduction of free primary education, the Kenyan government has continued to invest heavily on the program for its sustainability and realization of the UN Millennium Development Goal and the Education for All goals (World Bank, 2010). As in many African nations that have implemented FPE, the question of implementation of FPE in Kenya has continued to elicit mixed reactions despite the huge investment by various stakeholders; especially donor funds being injected into the program. A large number of school going age children are still not enrolled in schools. The researcher therefore investigated the effects of capitation grant on implementation of free primary education in Seme Sub-County.

Specific Objectives of the study

i. To determine effects of capitation grant on retention rate in public primary schools
ii. To examine effects of capitation grant on enhancing quality academic performance

Justification of the Study

The study will be helpful in providing useful information to the governments through the ministry of education, donors and the academia in that; it will help both the national and the county governments, primary school head-teachers, development partners and communities in providing them with information on the usage of capitation grant in public primary schools and areas which need to be improved in terms of the provision of funds and policy. It will provide the government with useful information on how public primary schools implement capitation grant so as to assist them in deliberating and coming up with appropriate policies that can guide education funding for efficient and quality education outcome. The study will also help the government through the ministry of education with useful data, which can assist them in analyzing strategies and establish their effectiveness in order to take effective measures regarding the achievement of the funding policies in public primary schools.

Literature review

This section reviewed literature on some past studies and evaluated their contribution to the objectives of this study. To enhance a comprehensive analysis, the section looked into effects of capitation grant on retention rate and academic performance of pupils in public primary

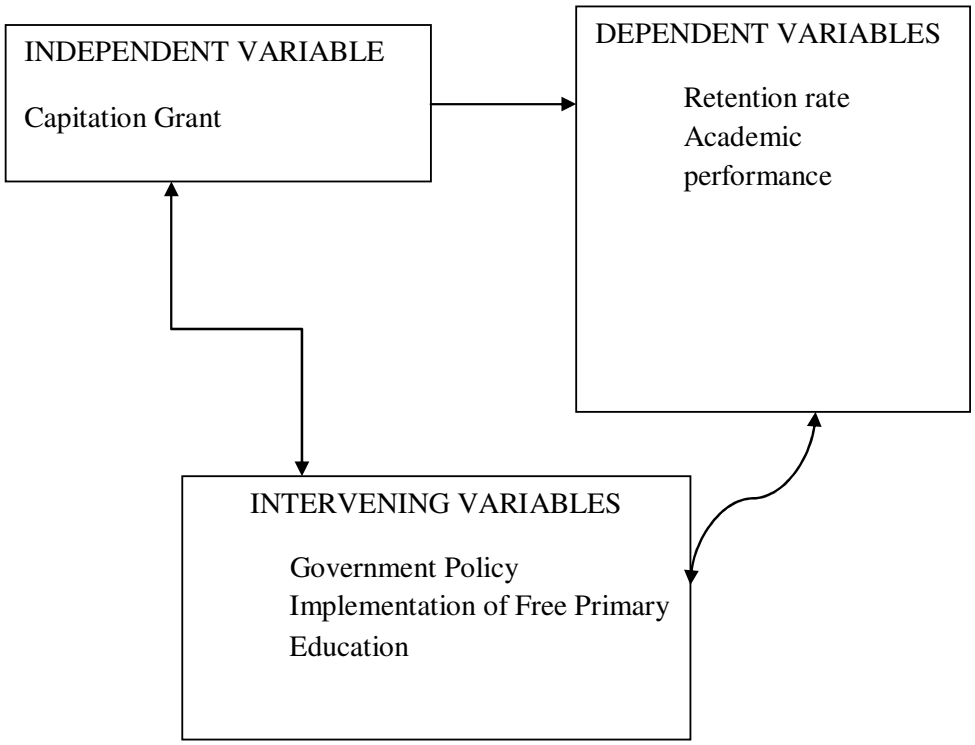

Figure 1. Conceptual framework *(Source: Researcher, 2016)*

schools with an aim of establishing the positions held by different authors about the same.

Theoretical Review

This study was guided by the Human Capital theory developed by Adam Smith in 1776. Throughout Western countries, education has recently been re-theorized under Human Capital Theory primarily an economic device. Human Capital Theory is the most influential economic theory of Western Education, setting the framework of Government policies since the early 1960's it is seen increasingly as a key determinant of economic performance. A key strategy in determining economic performance has been to employ a conception of individuals as human capital and various economic metaphors such as technological change, research, innovation, productivity, education and competitiveness.
In the Wealth of Nations (1776), Adam Smith formulated the basis of what was later to become the science of human capital. Over the next two centuries, two schools of thought can be distinguished. The first school of thought distinguish between the acquired capacities that were classified as capital and the human beings themselves, who were not. A second school of thought claimed that human beings themselves were capital. In modern Human Capital Theory, all human behavior is based on the economic self-interest of individuals operating within freely competitive markets. Other forms of behavior are excluded or treated as distortions of the model. A prominent explanation for that move is provided by a recent reformulation of Human Capital Theory which has stressed the significance of education and training as the key to participation in the new global economy. This theory underscores the framework of government education funding policies for economic growth that are tailored towards enhancement of labour flexibility through regulatory reform in the labour market, as well as raising skill levels by additional investment in education, training and employment schemes, and immigration focused on attracting high-quality human capital. While it may be granted that education contributes to growth, so do many other activities. Blaug (1987) asserts that what must be illustrated is "not that education contributes to growth, but that more education would contribute more to growth at the margin than more health, more housing, more roads.

In this respect, Blaug (1987) argued that "public expenditure on education depends not only on the costs of instruction but also on the volume of direct aid to learners." Blaug (1987) further noted that the "levels of public spending on learners aid can encourage or

discourage the private demand for tertiary education but cannot directly affect levels of economic development or rates of growth of Gross National Product (GNP) per head". Even within economic discourse, 'investing' in education, does not necessarily bring equity. Nevertheless, the commitment of governments to education policies of economic growth through human capital development is increasingly funded through several capitation grants. It recognizes the strategic importance of improving the overall education level of Kenyans within the context of poverty reduction and economic growth. Education is the key determinant of earning and important exit from poverty, increased investment in human capital including health and education is identified as one of the four pillars of the government's economic recovery strategy. Education is an investment in human capital and empirical evidence based on endogenous growth model shows that human capital is a key determinant of economic growth. Recent studies on human capital returns in Kenya shows that capital return increase as the level goes higher. Education can reduce social and economic inequality today. Kenya is characterized by large inequalities with respect to income distribution and this has constraint economic growth. Investment in education is an important strategy to address such inequalities hence facilitates economic growth. The government involvement in training is therefore justified on the basis that human capital development has large social returns and it will also increase demand for more equitable education attainment which is an important human welfare indicator. The application of this theory in the present study, is underpinned on the costs of the resources invested in the educational system through various capitation grants such as Free Primary Education (FPE) for provision of good infrastructural learning facilities through repair and maintenance of classrooms and building of toilets, adequate number of non teaching staff, availability of text books, exercise books, teachers' guides and reference materials. The net returns of spending on education are therefore the availability of human capital especially when more pupils are enrolled in schools and perform impressively in their exams.

Conceptual Framework

According to the conceptual framework in figure 1 above, capitation grants (independent variable) while dependent variables are represented by retention rate and quality academic performance. On the other hand, intervening variables are shown by government policies and effective implementation of free primary education. The framework shows that there is a direct relationship between independent variables and dependent variables given that capitation grants affects, retention rate and academic performance. However, for this relationship to hold, intervening variables such as government policy and implementation of free primary education must come into play.

Effects of Capitation Grant on Retention Rate in Public Primary Schools

Retention to schooling is linked to higher levels of skills and knowledge required for participation in our increasingly knowledge-based society and the wider global community (Norton, Sanderson, Booth, & Stroombergen, 2000). In United States of America, Ontario; Dooley, Payne, Robb, (2013), did a research to explain whether capitation grant, scholarships and bursaries had an impact on persistence and academic success in university. The study used ex post facto design, where data from two universities in Ontario were used to analyze the relationship between entrance, financial aid awards and success in university.

Inferential statistics inform of simple regressions analysis was adopted to bring out association between the two variables. The study found that first-year (entrance) scholarships and bursaries at both universities have only modest effects on student grades and credits earned and generally no association with persistence and degree completion among students as a whole. However, reviewing this study shows that it only used simple regression analysis, which had limited set of controls for the variables correlated with both financial awards and persistence. Hence, omitted variables may cause these coefficients to be biased in explaining the causal impact of capitation grant on university outcomes. Besides, using ex post facto design, there were limited and restricted data, which could not provide peoples' opinion and views on the research questions. The present study intends to fill this gap by adopting descriptive statistics as well as inferential statistics to obtain estimates of the causal effects that is freer of bias. This will help in providing the reality that happens on the ground.

The government of England target that almost all school going age children should access basic education and so has prompted many initiatives to achieve this. National policies, however, are often implemented at institutional or local level. As a result, the impact upon the individual participants can vary according to the context in which the measures are enacted. Sue, Andrew, Arthur and Neil (2006), conducted a study in England investigating whether capitation grant had impacts on students from low-income backgrounds. The study used mixed methods study design. Drawing on quantitative and qualitative data, the study reports differences in the

ways in which two institutions administered their capitation grants, and the effects on the students. Using descriptive statistics for analysis, the study found that at both institutions, students from schools that utilize effectively their capitation grants were more likely to continue with their studies as compared to students from schools that improperly implement their capitation grant. The interview data further suggests that bursary students were well motivated and determined to succeed. These findings inform the current study in the sense that the researcher will be able to determine whether the schools in Seme Sub-county also use capitation grant to offer bursary to pupils and its impact on school completion rate.

Babalona (2008) carried out a study in attempts to offer practical explanations on how to move recurrent resources from areas where there is overfunding to where there is underfunding with respect to the costing parameters recommended for Nigerian Universities by the National Universities Commission (NUC). Using a descriptive statistics, Babalona (2008) found that there were overspending on general administration, general academic and retirement benefits at the expense of research and public service. Furthermore, the study shows that non-NUC grants, gifts and external aid require further tapping to supplement the NUC which supplied over 80 percent of the total revenue. The regression equations predict that by increasing the enrolment size as well as the junior staff ratio; and by reducing non-academic/academic staff ratio; the student/teacher ratio, the goods cost per student, the curriculum cost and the spending deviation, it will be possible to increase the average expenditure on research and public service hitherto neglected and simultaneously reduce unit administrative supports costs. Reviewing this study indicates that it was majorly concerned with impact of education funding on learning environment in university setting, and did not provide any information on effects of education funding on primary school setting. The present study will fill this gap by focusing on how capitation grant through FPE funds influence pupils' retention as one of its study objectives.

Osei, Owusu, Asem, and Kotey (2009), conducted a study on the effects of the capitation grant on education outcome in Ghana. The objective was to assess how the capitation grant impacted on the Basic Education Certificate Examination (BECE) pass rates, gross enrolment ratios and gender difference in pass rates. The study used data from the Ghana Education Service for all 138 educational districts in Ghana between 2003 and 2007. Using regression analysis, Osei, *et al,* (2009) study found that; the capitation grant has not had significant impact on BECE pass rates in Ghana, no significant relationship existed between capitation grant and gross enrolment, and capitation grant had not impacted on bridging the gap between the BECE pass rates for male and female candidates. It is a general knowledge that to achieve improvement in performance in educational outcomes (for example pass rates in examination), there is the need, among other things, for attendance at schools and retention in classrooms (Ananga, 2011). These facts give rise to the question as to whether the introduction of the Capitation Grant and School Feeding programme have led to an increase in basic school enrolment, improved attendance and sustained retention. The present study seeks to find out whether such relationship exists in the Kenyan context based on its capitation grant for public primary schools.

A study conducted by Vermeersch and Kremer (2005), on effect of free primary education on school participation in Kenya, found that school participation went up by over 75% as compared to previous years when there was no free primary education grants. This was because initially, parents could face significant private costs of education, either for school fees or for other inputs such as uniforms. This discouraged students from attending schools especially those from poor background where school fees affordability was a problem. In similar vein, Kremer *et al.* (2002) evaluated a programme in which a NGO, International Christelijk Steunfonds Africa (ICS), provided uniforms, textbooks, and class-room construction to seven schools, randomly selected from a pool of poorly performing candidate schools in Kenya. They found that school dropout rates fell considerably in treatment schools, and after five years pupils in treatment schools had completed about 15 percent more schooling.

Njau (2013) conducted a study on effects of Secondary Education Bursary Fund (SEBF) on access and retention of students in secondary schools in Juja constituency, Kiambu County. The study used the descriptive survey research design. The target population was all the twenty two secondary schools in Juja constituency while the sample size constituted 400 students, 10 head teachers and three SEBF committee members. This was 45.5% of the target population. Data collection was done using questionnaires and interview schedules while data analysis was done using descriptive statistics. From the study findings, the study concluded that majority of the students came from poor economic backgrounds. The SEBF was a critical source of funds for financing education as majority of parents did not have a stable source of income. The lack of the school fees requirements was a major hindrance on access and retention of students in secondary schools. The level of awareness on SEBF application and qualification criteria was very low in secondary schools in Juja constituency and therefore the deserving students did not apply for the

SEBF. The SEBF allocated was not enough to cater for all the educational costs. Reviewing this study shows that the study was more on challenges facing the disbursement of the bursary funds. The study therefore, provided very little information on the effects of capitation grants on access and retention of students in public primary school education. The present study will fill this gap by investigating the effects of capitation grants on retention of pupils in public primary schools. It will also employ inferential statistics other than descriptive statistics in order to bring out how the variables correlate.

Free primary education capitation grant on Academic Performance

In United States of America, Dooley, Payne and Robb, (2013) conducted a study in Ontario to explain whether education scholarships had an impact on persistence and academic success among the university students. The study used ex post facto design, where data from two universities in Ontario were used to analyze the relationship between entrance financial aid awards and success in university. Inferential statistics inform of simple regressions analysis was adopted to bring out association between the two variables. The study found that first-year (entrance) scholarships and bursaries at both universities had only modest effects on student grades and credits earned and generally no association with persistence and degree completion among students as a whole.

However, reviewing this study showed that it was majorly based on university settings hence had little on primary schools. Besides, using ex post facto design, there were limited and restricted data, which could not provide peoples' opinion and views on the study objectives. The present study filled these gaps by focusing on public primary schools and adopted descriptive statistics as well as inferential statistics such as regression discontinuity analysis to obtain estimates of the causal effects that is freer of bias. This will help in providing true picture on the ground.

Government of England targeted that by 2015 all the school going age children should access universal primary education prompted many initiatives to widen participation. National policies, however, were implemented at institutional or local levels. Sue, Andrew, Arthur, and Neil (2006) conducted a study in England investigating whether bursary schemes had impacts on students from low-income backgrounds. The study used mixed methods of study design. Drawing on quantitative and qualitative data, the study reported differences in the ways in which two institutions administered their bursary schemes, and the effects on the students. Using descriptive statistics for analysis, the study found that at both institutions, bursary students were more likely to continue with their studies one year after entry than students from low-income backgrounds who were not in receipt of financial assistance. The interview data suggested that bursary students were well motivated and determined to succeed. A review of this literature shows weaknesses in the chosen study design because the method could not solve discrepancies that arise in the interpretation of the findings. For instance, it is unclear whether succeeding in class was due to the additional financial support or to the process of conscious choice through which they have entered higher education. The present study filled this gap by adopting inferential statistics in analysis in order to capture the correlation between the variables.

Mohammed (2010) conducted a study on impact of capitation grants on access to primary education in Ghana. Using case study methodology, the data for the study were obtained from three sources: the World Bank World Development Indicators, United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute of statistics, and the Ghana Education Management Information System. The analyses were carried out by observing indicators related to education access including Georgia Association of Realtors (GAR), National Assessment Resource (NAR) and out-of-primary school children; and by indicators related to participation including Gross Enrolment Rate (GER), Net Enrolment Rate (NER), Gender Parity Index (GPI), and primary completion rate. The results of the study showed that capitation grants had to some extent contributed to greater access to primary education in Ghana albeit, not enough to enable Ghana to achieve the education-related MDGs by the target date. All the indicators measuring access and participation in education increased significantly following the implementation of the capitation grants policy. However the above reviewed literature shows that it had a methodological weakness because of its overreliance on secondary sources of data and a case study research design which does not give the provision of generalization and application of the data to other areas. Moreover, secondary data could not give room for quantitative data. The present study filled this gap by using descriptive survey design in order to provide true picture on the ground.

Omwami, and Omwami (2009), conducted a study on public investment and the goal of providing universal access to primary education by 2015. The study used population census data to project school enrolment for Kenya. It employed current education sector budget and national revenue base statistics to model the sector budget and to forecast the revenue base growth required

to sustain universal primary education (UPE). The 2003 fiscal year unit cost of education was used as the base value for computing the budget needed to fund UPE through 2015, the year by which the international community aims to achieve UPE. The study applied econometric analysis in exploring the policy implications for the education sector budget and capacity for revenue generation that would support the budgetary growth needed.

According to the study findings, since the implementation of the Free Primary Education Policy, enrolment significantly increased. In fact, the elimination of user fees saw an increase of over 1 million children attending school in 2003 than in the previous year. As a recommendation, the study recommended that to accommodate all children under the new Free Primary Education Policy, increasing funding and eliminating all indirect costs of schooling at the primary education tier was necessary. However, reviewing this literature shows that it failed to take care of respondents' opinion and views given that its data were based on secondary sources. The present study will fill this gap by adopting descriptive survey design.

Melap (2014) conducted a study on effect of abolition of primary education school fees on pupil participation and academic performance. The study provides comparison of pupil participation and academic performance in the period preceding the introduction of FPE in 2003 and after the introduction of FPE to the year 2013. The study found that since the inception of FPE, pupil participation increased tremendously on one hand and national academic performance is still below average marks of 250. The study found regional disparities in terms of academic performance and pupil participation. To ensure pupil participation in primary education, the study recommended removing all costs relating to schooling so that education is completely free. Reviewing this study shows that data was only sourced from secondary sources hence it could not provide quantitative and qualitative data based on people's opinion, hence could not provide the true picture on the ground. The use of descriptive statistics from primary sources of data will therefore be used to fill this gap.

RESEARCH METHODOLOGY

The study used descriptive survey design to carry out the study in with both qualitative and quantitative methodologies of collecting data. The study sample comprised of 86 head teachers, who were selected purposively and proportionately while 269 teachers were selected through simple random sampling technique. Teachers were given questionnaires, while head teachers were also interviewed. Data was collected by use of questionnaire and interview schedule. Coded data was presented using Statistical Package for Social Sciences (SPSS) version and analyzed using descriptive statistics such as percentages presented in tables as well as Pearson correlation to establish the relationship between the variables.

RESEARCH FINDINGS AND DISCUSSION

Since the overall objective of this study was to investigate the effects of capitation grant on implementation of free primary education in Seme sub-county, the study was limited to this geographical division. The field research was comprehensive, giving most of the attention to the variables of this study which included: effects of capitation grant on retention rate and effects of capitation grants on enhancing quality academic performance. All these variables were captured in the questionnaires and the responses were highlighted as below.

Finding on Questionnaire Return Rate

The researcher measured the return rate and the findings were shown in Table 1

The return rate of the questionnaires was 64.3% (173) from the teachers' respondents. The return rate from the head teachers was 100% (86) and all the questionnaires were usable. This response return rate was achieved because the researcher administered the questionnaires and conducted the interviews in person.

Demographic Information

Response by Gender

The respondent's gender was determined in this study. The response is summarized in Table 2 below:

Considering the response by gender, majority of the teachers' respondents were male (58.3%) with female teachers making only 41.7%. This could be attributed to the fact that male child education is encouraged more than the girl child, although gender parity in education is slowly being realized due to the many affirmative action programs championing girl child education (Onditi, 2011). As for school head teachers to whom the questionnaires were administered, the study found that, out of the 86 head teachers, 88.4 % (76) were males with female head teachers being 11.6% (10). This is an indication that the gender parity gaps continue to widen as male and female tend to move high up in the education ladder (Onditi,

Table 1. Return Rate of Questionnaires (N = 269; teacher; N=86 head teachers)

Category of the Respondent	No Response	Targeted Number of Respondents	Number of respondents that participated	%
Teachers	94	269	173	64.3
Head Teachers	00	86	86	100

Source: Data Analyzed from Questionnaires

Table 2. Respondents by Gender (N =259; Male =177; Female =82)

	Male		Female	
Respondent Category	Frequency	Percentage	Frequency	Percentage
Teachers	101	58.4%	72	41.4%
Head teachers' (questionnaires)	76	88.4%	10	11.6%
Head Teachers (Interview)	7	70%	3	30%

Source: Researcher's Analyzed Data

Table 3. Years served in the school

	Frequency	Percentage
Below 5 years	43	16.6%
6-10years	60	23.2%
11-15years	98	37.8
16 years and above	58	22.4
Total	259	100%

Source: Researcher's Analyzed Data

2014). The study further found that, out of the 10 Head-Teachers interviewed, 70% (7) were males while 30% (3) were females. The support the study carried out by Onditi (2014) on Roles and Challenges of Academic Women in Kenyan Public Universities: A Case Study of "E" University; which revealed that despite the gains which have been made in trying to achieve gender parity, the gender representation in institutions of higher learning is still very low in administrative positions (Onditi, 2014). The leadership gap between the male and female could be explained by the fact that several factors influence female teachers in accessing leadership positions than their male counterparts. However, most findings of the studies carried in the developed countries where teaching profession is dominated by female teachers (Hooper, 1991; cited in Onditi, 2014).

Years served in the school

The study sought to find out the job experience of the respondents as this was crucial in getting information on the trend in performance and enrolment rate. Table 3 shows the response.

The study found that most of the respondents cumulatively (at 83.4%) had served in their respective schools for more than 5 years hence were able to provide reliable information on trend of performance and enrolment rate since the introduction of FPE capitation grant.

Effects of Capitation grant on retention rate of primary school pupils

The study investigated how capitation grant affected the retention rate of primary school pupils in Seme Sub-County. Respondents (teachers) were asked to indicate their response on the following statements on a Likert scale ranging from 1 to 5, where; strongly Agree (SA) =1, Agree (A) =2, Neutral (N) =3, Disagree (D) =4, and Strongly Disagree (SD) =5. Table 4 shows the responses:

Findings in table 4 show that, over three quarters of the respondents cumulatively at 76.5% confirmed that because of capitation grant, school dropout rate had dropped significantly. This finding supports the observation made by Bakky and Oluwatayo (2013), who found that the Nigerian government had invested heavily on provision of instructional materials to schools in response to increased enrolment rate that was due to the introduction of universal basic education.

Table 4. Effects of FPE capitation grant on retention rate of primary school pupils

Items		1	2	3	4	5	TOTAL
Because of capitation grant, school dropout rate has dropped significantly.	F	110	88	30	13	18	259
	%	42.5	34.0	11.6	5.0	6.9	100
The enrolment rate has improved since the introduction of FPE	F	147	57	24	18	13	259
	%	56.8	22.0	9.3	6.9	5.0	100
Because of capitation grant, school retention rate has improved significantly.	F	155	54	29	12	9	259
	%	59.8	20.8	11.2	4.6	3.6	100
Because of FPE capitation grant, No pupil has missed any of his/her classes to look for school fees	F	98	106	27	16	12	259
	%	37.9	40.9	10.4	6.2	4.6	100
Were it not for FPE capitation grant, several pupils would have dropped out of school	F	168	37	25	15	14	259
	%	64.8	14.3	9.7	5.80	5.4	100

Source: Researcher's Analyzed Data

Table 5. Enrolment Trend 2013- 2015

Year	Std 3		Std 4		Std 5	Std 6			Std 7		Total	Percentage increase
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls		
2013	462	448	521	508	572	556	571	541	583	546	5308	
2014	527	569	693	649	643	558	637	643	610	569	6098	14.9%
2015	759	624	836	783	783	733	823	777	724	601	7443	21.1%
Total	1748	1641	2110	1940	1998	1847	2031	1961	2187	1716	18849	

Source: Researcher's Analyzed Data

This shows that capitation grant policy through FPE had encouraged school enrolment and attendance hence decreased the dropout rate. Similarly, Sue, Andrew, Arthur and Neil (2006) found that students from schools that benefited effectively from capitation grants were more likely to continue with their studies as compared to students from schools that improperly implement their capitation grant. Improvement of the enrolment rate was also justified by majority of the respondents at 56.8% who strongly agreed that the enrolment rate had improved since the introduction of FPE. More than half of the respondents at 59.8% also strongly agreed that because of capitation grant, school retention rate has improved significantly. Kremer *et al.* (2002) carried out an evaluation programme in which a NGO, International Christelijk Steunfonds Africa (ICS), provided uniforms, textbooks, and class-room construction to seven schools, randomly selected from a pool of poorly performing schools in Kenya. They found that school dropout rates fell considerably in treatment schools, and after five years pupils in treatment schools were about 15 percent more likely to complete as compared to those pupils in un-treated schools. Therefore, it can be deduced that FPE capitation grant had encouraged pupils enrolment rate, retention rate and discouraged dropout rate.

Enrolment Trend 2013-2015

It was also significant to establish the number of learners in various classes from the selected 10 schools between the year 2013, 2014 and 2015, to help in assessing the enrolment. Table 5 shows the response.

Table 5 shows that enrolment rate and the population of the pupils had been increasing in between the three years. The percentage increase was in the range of 14.9% to 21.1%. The finding also shows that unlike before when the gender disparity was wider between boys and girls, the ratio of boys to girls in all the classes are almost equal. This finding also supports the observation made by Mohammed (2010) who found that capitation grants had to some extent, contributed to greater access to primary education in Ghana. Omwami and Omwami (2009) also found that since the implementation of the Free Primary Education Policy, enrolment has significantly increased. In fact, the elimination of user fees saw an increase of over 1 million Kenyan children attending school in 2003 than in the previous year. However, on the other hand, observation, a study by Melap (2014) found that since the inception of FPE, although the pupil participation had increased tremendously on one hand, the national academic performance was still below average marks of 250. The

Table 6. Correlation between FPE capitation grant and Enrolment Rate of the pupils (N =86)

		Pupils enrolment rate
FPE capitation grant	Pearson Correlation	.723
	Sig. (2-tailed)	.000
	N	86

Correlation is significant at the 0.05 level (2-tailed).
Source: Researcher's Analyzed Data

study found regional disparities in terms of academic performance and pupil participation.

Correlation between FPE capitation grant and Enrolment Rate of the pupils

The study also sought to investigate the relationship between FPE capitation grant and enrolment rate of the pupils in 86 selected public primary schools in Seme Sub-County since the introduction of the FPE capitation grant. The results of the analysis were presented in the table 6 above.

The results show a strong positive correlation between FPE capitation grant and pupils enrolment rate of the selected schools in Seme Sub-County, with r = 0.723 at P<0.05. This shows that increasing FPE capitation grants to public primary schools would increase the pupils' enrolment rate of the schools. This is supported by the findings of Sue, Andrew, Arthur and Neil (2006) who also found that at both institutions, students from schools that utilized effectively their capitation grants were more likely to continue with their studies as compared to students from schools that improperly implemented their capitation grant

Similarly, in one of the interviews with the head-teachers, one of the themes that came up was enrolment rate. One of the head teachers had this to say:

Enrolment rate had improved significantly and the school population is now larger as compared to those days when there was no FPE program. This can mainly be attributed to more pupils enrolling for learning even those from poor and aged families [Head-teacher, 4]

Another theme that also came out clearly was school attendance. It was found that FPE capitation grant had improved school attendance among the pupils. For instance, one of the head teachers during the interview narrated that:

There is a lot of improvement on the side of school attendance due to the fact that none of the pupils is sent home for school fees, and unless for some reasons other than school fees, most of the pupils are always in class [Head Teacher, 6]

Another head teacher said that:

Millennium Development Goal MDGs) came with a project called millennium development village piloted in Siaya County since 2003 to 2015. It has necessitated high enrollment rate, retention rate and high academic performance in schools like Barsauri, Ming'ao, Nyangulu, Ramula, Sagam primary schools (Head Teacher, 9)

Response from the three head teachers, explored the themes enrolment, retention and school attendance. These confirm that capitation grant encouraged pupils to stay in school until completion and reduced dropout rate. Similarly a study by Vermeersch and Kremer (2005) on effect of free primary education on school participation in Kenya, found that school participation went up by over 75% as compared to previous years when there was no free primary education grants.

Trend in KCPE performance since the year 2002 to 2014

The study also sought to investigate the trend in KCPE performance since the year 2002 to 2014. This was crucial to establish the effect of FPE capitation grant on academic performance. Table 7 shows the findings.

Table 7 reveals that the KCPE performance of pupils in Seme Sub-County had been on the upward trend since 2002, with the highest mean score and highest marks achieved being 379 and 410 respectively registered in 2014 as compared to 272 and 356 in the year 2012 respectively. The improved performance could be traced to 2003 that was when the FPE capitation grant was incepted. It can therefore be concluded that owing to the FPE capitation grant, performance of the pupils had been improving. These findings are similar with the findings of Ontario; Dooley, Payne, Robb, (2013) in United States of America, where they also found that first-year (entrance) scholarships and bursaries at both universities effects positively the student grades and credits earned. However, Osei, *et al,* (2009) on the other hand found that the capitation grant had no significant impact on BECE pass rates in Ghana, it was also found that no significant relationship existed between capitation grant and gross enrolment, and that capitation grant had not impacted on bridging the gap between the BECE pass rates for male

Table 7. KCPE mean score performance (2002-2014)

Year	Means Score	Highest Score
2002	272	356
2003	292	375
2006	321	382
2007	348	401
2013	366	406
2014	379	410

Source: Document Analysis from School Records
Note: You need to create a column showing % increase in the years; this, at a glance, should be clearer than dealing with the highest scores.

Table 8. Correlation between FPE capitation grant and KCPE performance (N =86)

		KCPE performance
FPE capitation grant	Pearson Correlation	.843
	Sig. (2-tailed)	.000
	N	86

Correlation is significant at the 0.05 level (2-tailed).
Source: Researcher's Analyzed Data

and female.

During the interview session with the head teachers, one had to say:

"Since the introduction of FPE capitation grant, pupils had been able to perform well because of the availability of adequate learning materials and conducive learning environment, all of which are provided conveniently by the capitation grant" [Head teacher, 7]

This was also supported by the observation made by another head teacher during the interview, who also confessed that:

"I can say that the academic performance of the pupils had increased tremendously since the inception of FPE program because the pupils can now settle and learn without interruption of going home to look for school fees, or staying at home due to lack of school fees" [Head-Teacher, 5]

A study by Woodhall (2007) described how Harvard's decision to introduce scholarships based on merit in the 1930s helped lead to the creation of the scholastic Aptitude test as a mechanism for identifying high achieving public school students likewise in Kenya where schools are rated using the KCPE performance to grade schools into categories of best, averagely and poorly performing schools.

Correlation between FPE capitation grant and KCPE performance

Having determined the KCPE mean score performance in 86 selected public primary schools in Seme sub-county since the introduction of the FPE capitation grant, the researcher sought to establish whether there existed a correlation between the capitation grant and KCPE performance. The results of the analysis are presented in table 8 above:

The results shows a strong positive correlation between capitation grant and KCPE performance of the selected schools in Seme sub-county, with $r = 0.843$ at $P<0.05$. This shows that availing capitation grants in adequate amount to public primary schools would increase the academic performance of the school (Using the rho obtained above, explain how it will do that). This concurs with the findings of Sue, Andrew Arthur, & Neil (2006) in their study conducted in England investigating whether bursary schemes had impacts on students from low-income backgrounds. Melap (2014) found that since the inception of FPE, pupil participation had increased tremendously on one hand and national academic performance was still found to be below average marks of 250 citing other challenges such as over enrolment, large class sizes and inadequate teaching and learning facilities.

CONCLUSIONS

The study found that over three quarters of the respondents cumulatively at 76.5% confirmed that because of capitation grant, school dropout rate had dropped significantly. Improvement of the enrolment rate

was also justified by majority of the respondents at 56.8% who strongly agreed that the enrolment rate had improved since the introduction of FPE. More than half of the respondents at 59.8% also strongly agreed that because of capitation grant, school retention rate has improved significantly. The finding also showed that unlike before when the gender disparity was wider between boys and girls, the ratio of boys to girls in all the classes were almost equal. The results showed a strong positive correlation between FPE capitation grant and pupils enrolment rate of the selected schools in Seme Sub-County, with $r = 0.723$ at $P<0.05$. Qualitative information from the interview with the head teachers also found that capitation grant encourages pupils to stay in school until completion and reduces dropout rate. The study also found that the KCPE performance of pupils in Seme Sub-County had been on the upward trend since 2002, with the highest mean score and highest marks achieved being 379 and 410 respectively registered in 2014 as compared to 272 and 356 in the year 2012 respectively. The improved performance could be traced to 2003 that was when the FPE capitation grant was incepted. It can therefore be concluded that owing to the FPE capitation grant, performance of the pupils had been improving. The results showed a strong positive correlation between capitation grant and KCPE performance of the selected schools in Seme sub-county, with $r = 0.843$ at $P<0.05$.

It was thus concluded that implementation of Free Primary Education in Kenya led to increased enrolment in schools. The percentage yearly increase was in the range of 14.9% to 21.1%. Alongside this increase, disparity between boys and girls was narrowed. There was increased retention of learners in primary schools, reduced school dropout rates and led improved performance in KCPE examination.

REFERENCES

Ananga E (2011). The Dropout Experience of Basic School Children in Rural Ghana: Implications for Universal Basic Education Policy, Unpublished DPhil Thesis, University of Sussex, Falmer, UK.

Babalola JB (2008). Cost and financing of university education in Nigeria, *Journal on Higher Education*; Volume 36, Issue 1, pp 43-66.

Bakky NA, Oluwatayo GK (2013). The Nigeria Universal Basic Education Program: The Status Quo and the Way Forward; *Research J. Organizational Psychology and Educational Studies, 2(6) 325-332.*

Blaug M (1987). "Rate of return on investment in Great Britain". In M. Blaug, *The Economics of Education and the Education of an Economist*. New York: New York University Press.

Dooley MD, Payne AA, Robb AL (2013). *The Impact of Scholarships and Bursaries on Persistence and Academic Success in public primary schools*. Toronto: Higher Education Quality Council of Ontario.

Kremer M, Moulin S, Namunyu R (2002). Unbalanced Decentralization in Kenya, University of Nairobi.

Melap S (2014). Effect of Abolition of Primary Education School Fees on Pupil Participation and Performance; Unpublished thesis; University of Nairobi.

Ministry of Education, (2015). Guidelines on Capitation Grant. Ministry of Education.

MoEST (2013). A report of Sector Review and Departmentation of Free Primary Education, Nairobi: Ministry of Education Science and Technology.

Mohammed AD (2010). The Impact of Capitation Grants on Access to Primary Education in Ghana; unpublished thesis.

Njau RW (2013). Effect of secondary education bursary fund on access and retention of students in secondary schools in Juja constituency, Kiambu County; Unpublished thesis; Kenyatta University.

Norton P, Sanderson K, Booth T, Stroombergen A (2000). *A literature review of the effect of school resourcing on educational outcomes*. Report to the Ministry of Education. Wellington: Ministry of Education.

Omwami EM, Omwami RK (2009). Public investment and the goal of providing universal access to primary education by 2015 in Kenya; *Int. J. Edu. Dev.*

Onditi MA (2011). Access and Equity of female students in Higher education: A comparative study of China and Kenya; Unpublished Masters Thesis, East China Normal University,Shanghai-China.

Onditi MA (2014). Roles and Challenges of Academic Women in Kenyan Public Universities: A Case Study of "E" University. Unpublished Doctoral Dissertation, East China Normal University, Shanghai-China.

Osei RD, Owusu GA, Asem FE, Kotey RL (2009). "Effects of Capitation Grant on Education Outcomes in Ghana", ISSER, Global Development Network, www.gdnet.org, accessed on April 5, 2010.

Republic of Kenya (2007), Economic Survey. Office of Vice President& Ministry of Planning & National Development: Central Bureau of Statistics.

Sue H, Andrew H, Arthur B, Neil H (2006). Opportunity knocks? The impact of bursary schemes on students from low-income backgrounds; *J. Higher Edu. Volume 30, Issue 4* pages 373-388.

Vermeersch C, Kremer M (2005). School Meals, Educational Achievement, and School Competition: Evidence from a Randomized Evaluation. World Bank. World Bank Policy Research Working Paper No. 3523.

World Bank (2010). The 257 World Bank Discussion Papers Involving the Quality of Primary Education in Latin America and the Caribbean towards the 21st century. Washington D.C.: World Bank.

Young People Learning Agency (2012). Government Bursary Scheme.16-19 Education and Training. United Kingdom.