

Influence of Increased Student Enrolment on Internal Efficiency in Teaching and Learning in Public Secondary Schools in Kisii Central Sub County, Kisii County, Kenya

¹Isabella Buyaki Bota, ²Dr. Charles Ocharo Momanyi

¹Bed (AGED) Egerton University, Med (EAPE), PhD(EAPE)ongoing, Kisii University

²Bed (Sc) Catholic University, Med (EAPE), PhD(EAPE), Kisii University

Abstract: The introduction of FSE caused enrolment to rise as the burden of financing education by parents and guardians was reduced leading to many students who would not have transited to secondary school to access secondary education. This increased enrolment was likely to affect internal efficiency in teaching and learning without corresponding resources. Thus the study purposed to examine the influence of increased enrolment on internal efficiency in public secondary schools in Kisii Central Sub County, Kisii County, Kenya. Objectives of the study were to: establish enrolment trend in relation to internal efficiency in public secondary schools between 2005-2012; Related literature was reviewed that gave insights into the area of study. A conceptual framework was used in the study. A descriptive research design was adopted in the study. The target population of the study was 60 head teachers, 240 class teachers and one quality assurance and standards officer. Stratified, random and purposive sampling was used to pick out 20 schools for the study and in extension 20 head teachers, 80 class teachers and one District Quality Assurance and Standards Officer (DQASO). Questionnaires, interview schedule and document analysis schedule were used to collect data. Validity was established by expert opinion from supervisors. Piloting was done to establish reliability. The research instruments were administered, filled by the respondents and collected by the researcher. Descriptive statistics was used to analyze data. The descriptive statistics involved frequency counts, mean and weighted averages. The information was presented using: frequency tables, pie charts and bar graphs. The study found out that: there was a general increase in enrolment over the years, a sharp one noted in 2008; majority of schools had inadequate physical facilities, and the ones that were endowed with some, were inadequately equipped hence hindering effective curriculum implementation leading to internal inefficiency, affecting internal efficiency and there was an inverse relationship between candidature and KCSE performance. The government should also consider increasing student capitation; stakeholders should be mobilized to support schools not only in the provision learning resources but also in their equipment to meet the needs of increased candidature.

Keywords: Enrolment, internal efficiency, KCSE performance, public secondary schools.

I. INTRODUCTION

There is a strong positive link between education and income growth. The growth effect comes through several channels; among which are the ability to create and absorb new technologies, improve health, increased savings and investments (especially in human capital) (Baldwin & Borrelli, 2008).

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Goldin (2001) opines that the tremendous growth of secondary education in the United States, which took place about 50 years before the corresponding growth in European countries, entailed a template that was very different from the European practice of secondary schooling. This U.S. template encompassed: public funding and provision; an open and forgiving system (non-selective, with no early specialization or academic segregation); an academic yet practical curriculum; numerous small, fiscally independent school districts; and secular control of schools and school funds. In the United States of America (USA), the Federal Government supported public education. The government was empowered by the Constitution Welfare Clause, Article 1 Section 8, to levy taxes and collect revenues for the support of education. However, the Congress decided the extent of such support.

Nyaga (2005) noted that in Japan, the government's fiscal policies provide for free education up to secondary school level. Those of school going age had no option other than attend school to acquire education that was fully funded by the government.

Kenya, like other developing countries, has embraced the provision of quality education and relevant training for all as a key factor for the achievement of national development. Great attention has therefore been given to the formulation of appropriate education policies to ensure maximum development of the human capital who will contribute adequately in the country's development. It is for this reason that one of Kenya's guiding philosophies of education is the concern that every Kenyan has an inalienable right of education, no matter his or her socio-economic status to basic education (Republic of Kenya, 1997). According to Munavu, Ogutu & Wasanga, (2008), quality education at all levels will enable Kenyans to utilize their natural resources efficiently and effectively in order to attain and maintain desirable lifestyles.

Table 1.1 Enrolment Trend in Public Secondary Schools from 1996 to 2012

YEAR	BOYS	GIRLS	TOTAL
1996	352,912	305,157	658,069
1997	363,705	323,726	687,431
1998	373,421	327,119	700,540
1999	397,176	301,185	698,361
2000	402,976	356,509	759,485
2001	431,443	386,814	818,257
2002	443,190	390,513	833,7033
2003	455,971	392,140	848,111
2004	463,663	394,946	858,609
2005	466,791	398,753	865,544
2006	478,518	424,528	903,046
2007	556,459	470,306	1,026,765
2008	654,106	557,008	1,211,114
2009	710,904	613,889	1,324,793
2010	798,029	689,960	1,487,989
2011	807,041	712,524	1,519,565
2012	825,670	729,973	1,555,643

Source: EMIS, Ministry of Education (2013)

In 2007, the total enrolment was 1,026,765 whereas in 2008 when FSE was introduced the enrolment increased to 1,211,114 a difference of 184,349 (17.95%). This increasing trend continued over the years where in 2012 it shot up to 1,555,643, an increase of 528,878 (51.51%). The increased enrolment greatly affected the available resources which in turn negatively affected internal efficiency in teaching and learning in secondary schools, which was the basis of this study that was done in Kisii Central Sub-County.

Statement of the Problem:

The introduction of FSE caused enrolment to rise further as the burden of financing education by parents and guardians was reduced leading to many students who would not have transited to secondary school to access secondary education. This increased enrolment resulting from FSE was likely to affect internal efficiency in teaching and learning without

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corresponding resources. No known study to the best ability of the researcher has been done in Kisii Central Sub County which relates increase in enrolment with internal efficiency in teaching and learning processes in public secondary schools, and therefore the position is unknown. Therefore the study examined the influence of the rising enrolment on internal efficiency in public secondary schools in Kisii Central Sub County, Kisii County, Kenya.

Purpose of the Study:

The purpose of the study was to examine the influence of increased student enrolment on internal efficiency in teaching and learning in public secondary schools in Kisii Central Sub County, Kisii County, Kenya.

Objective of the Study:

The objectives that guided the study were to:

- i. Establish enrolment trend in relation to internal efficiency of public secondary schools between 2005-2012 in Kisii Central Sub County.

Research Question:

The study sought to answer the following questions:

- i. What is the enrolment trend in relation to internal efficiency of public secondary schools between 2005-2012 in Kisii Central Sub County?

Significance of the Study:

The study was significant in the following respects: Firstly, the knowledge generated from the study will add to the body of vast knowledge on internal efficiency in teaching and learning. Secondly, it will enlighten educational planners, on strategies to help improve efficiency in teaching and learning, and on generation of educational policies aimed at enhancing internal efficiency in teaching and learning. Thirdly, this study will assist head teachers as managers of schools to address challenges faced in teaching and learning as enrolment soars in schools. Fourthly, if the recommendations of this study are implemented, learners will benefit immensely because curriculum would be implemented in schools systems which would enhance their learning outcomes. Fifthly, it will be useful to parents since it will enlighten them on the need to be part of the solutions in addressing the internal efficiency in their schools. Lastly, the study will be useful to all education stakeholders on issues of internal efficiency with a view of improving on service delivery

II. LITERATURE REVIEW

Enrolment Trends in Public Secondary Schools:

The provision of secondary education has changed markedly since independence with the number of schools and students increasing from 151 and 30,000 in 1963 to 4,111 and 1,487,989 in 2010 (MOE, 2012). The introduction of Free Secondary Education (FSE) resulted in higher increase in enrolment in public secondary schools by 17.1 percent in 2008 (Republic of Kenya, 2009) as compared to 13.7 percent in 2007, and the increase was noted in the subsequent years.

Asian Network of Training and Research Institutions in Educational Planning (ANTRIEP) (1998) did a study on 'Improving school efficiency: The Asian experience' done in Colombo, Sri Lanka. The purpose of the study was to improve school efficiency. The objectives were to: give an overview of the situation of different countries in Asia; examine how both external and in-school supervision and support services should be strengthened and adapted to have a positive impact on the quality of schools; explore the role that evaluation mechanisms (examinations, achievement tests and others) can play in improving the quality and effectiveness of schools; and discuss the system of teacher deployment and management, and ask at what levels different decisions about deploying and managing teachers can best be taken and how this decision process can be improved. The study found out among others that: evaluations of elementary and secondary schools are undertaken without sufficient information regarding developments in the field which gives immense scope for prolonged bureaucratic formalities; evaluation leads to overwork among school staff and that the standards for evaluation are so abstract that it is almost impossible for the evaluators to communicate with the schools. The reviewed study looked at the aspect of efficiency improvement in general, where it focused on what negatively

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affected efficiency, while the current study specifically looked at how internal efficiency is affected by increased enrolment in public secondary schools.

Nega (2011) in a study on 'Improving Internal Efficiency in Primary School of Tigray Regional State: Challenges and Prospects' done in Ethiopia had the purpose of examining the challenges and prospects of primary education in Tigray. The objective was to find out measures for improvement of the internal efficiency of the primary education system in the region. A descriptive survey research design was employed. Questionnaires, document review and semi-structured interview schedules were used to collect data. According to the research findings, some of the major factors that caused student dropout and repetition were: significant students were over age; principals and teachers were less qualified; parents were illiterate/ limited parents' educational awareness; shortage of text book/school facilities and students who came from low economic background had negative attitude to education and health problems. Whereas the study under review was based on primary schools, the current study focused on public secondary schools. The reviewed study also looked at the challenges and prospects of improving internal efficiency, whereas the current study specifically singled out how increased enrolment affected internal efficiency.

Ncube (2004) in a study on 'Managing the Quality of Education in Zimbabwe' had the purpose of analysing how the management of the quality of education of Rural Day Secondary Schools has been affected by the internal efficiency of the school system. The objectives of the study were: to find out the indicators such as survival rates; dropout rates; repetition rates and pass rates, to establish the variations in levels of indicators of internal efficiency for pupils of different sexes, ages and levels of schooling, to investigate the views of school managers (including some senior teachers) on factors that affect the internal efficiency in Rural Day Secondary Schools and to find out the views of school heads on strategies that can be implemented to improve the internal efficiency of Rural Day Secondary Schools. The study employed quantitative and qualitative designs. The study found out that the internal efficiency of Rural Day Secondary Schools was low. Whereas in the reviewed study internal efficiency is the independent variable, in the current study it is the dependent variable. The reviewed study looked at how internal efficiency of school systems affected the management of the quality of education of rural day secondary schools while the current focused on the influence of increased enrolment on internal efficiency in public secondary schools without discrimination on the basis of geographical location and status (whether day or boarding schools).

Adeyemi (2012) in a study on School Variables and Internal Efficiency of Secondary Schools in Ondo State, Nigeria had the purpose of investigating the relationship between school variables and internal efficiency of secondary schools. The objectives of the study were: to determine whether or not secondary schools in Ondo State, Nigeria were internally efficient and to determine whether or not a relationship exists between school variables and internal efficiency of the schools in order to correct erroneous impressions. The study used the inventory and the questionnaire as data collection instruments. This study adopted the ex-post facto and correlation research designs. The study found out that secondary schools in Ondo State, Nigeria were internally efficient. Teachers' qualification was found to be the best predictor of internal efficiency in the schools. The study reviewed aimed at finding out whether the schools under study were internally efficient or not, and if a relationship existed between school variables and internal efficiency, whereas the current study looked at how increased enrolment affected internal efficiency. The study reviewed used ex-post facto and correlation research designs while the current study used descriptive survey research design.

Boru (2013) in a study on 'Factors Influencing Internal Efficiency in Public Primary schools of Moyale District, Marsabit County, Kenya' had the purpose of establishing the factors influencing internal efficiency in public primary schools in Moyale District. The objectives of the study were: to determine how adequacy of teaching and learning materials influence internal efficiency, to establish how school physical facilities influence internal efficiency, to assess how pupils' family background influence internal efficiency and to establish how drop out of pupils in the schools influence internal efficiency. The study adopted descriptive research design. The data was collected by use of questionnaire. The study found out that, adequacy of teaching and learning materials affected internal efficiency, teachers qualification and in servicing of teachers can help improve internal efficiency, and that schools did not have adequate teaching and learning materials which affected teaching and learning and hence internal efficiency. Further, physical facilities influenced internal efficiency because it encouraged meaningful learning and teaching. Schools' internal efficiency was found to be affected by pupils' dropout. Further, the findings also revealed that pupils' family background such as household poverty level affected internal efficiency. Whereas the reviewed study was based on primary schools, the current study was based

on Secondary Schools. The study reviewed looked at the factors influencing internal efficiency, whereas the current study focussed specifically on enrolment as a factor and how it affects internal efficiency.

Batoya, Simatwa and Ayodo (2013) in a study on ‘Influence of Home Based Factors on Internal Efficiency in Primary Schools in Bungoma North and Kimilili-Bungoma Districts, Kenya’ had the purpose study of examining the influence of home based factors on internal efficiency of primary schools in Bungoma-North and Kimilili-Bungoma Districts. Objectives of the study were to: establish the extent to which parental level of education, parental occupation, language use at home and parental income influence internal efficiency of primary schools. The research designs used were correlation and descriptive survey designs. The study used questionnaires and interview schedules as research instruments. From the research findings, the study established that parental level of education, occupation; income and language used at home do influence academic achievement of pupils. Fathers’ level of Education was a significant predictor of

pupils’ performance. The study reviewed focused on home based factors and their influence on internal efficiency in primary schools whereas the current study looked at enrolment as a factor and its effect on internal efficiency in public secondary schools.

Abagi and Odipo (1997) in their study on ‘Efficiency of Primary Education in Kenya: Situational analysis and implications for educational reforms’ had the purpose of determining the issues of efficiency in primary level in Kenya. The objective of the study was to investigate the issues of efficiency in primary schools. Data was collected from official documents within the Ministry of Education, Central Bureau of Statistics (CBS) and the Women’s Bureau. The study found out that that the conceptualisation of the term school or education efficiency in a developing country like Kenya took an ‘outcome perspective’ as opposed to ‘process perspective’. Further, the operation of primary education system in Kenya faces the problem of inefficiency. Completion rates had remained very low (less than 50 per cent) for the last five years. Besides, national pupil-teacher ratio was also low, about 31:1. This study also indicated that teaching-learning time was not utilised efficiently in primary schools. Several factors were behind such inefficiencies. These included: Education policies and management processes - mis-allocation of resources to educational levels; school based factors – teachers attitudes, time utilisation, school environment; and household based factors - poverty, socio-cultural factors, and gender issues. The study reviewed focused on issues that affected efficiency in primary schools whereas the current study focused on public secondary schools where it looked at how internal efficiency was affected by increased enrolment.

Conceptual Framework:

The study employed a conceptual framework which showed the relationship between increased enrolment (independent variable) and internal efficiency (dependent variable) as indicated in figure 2.1 below.

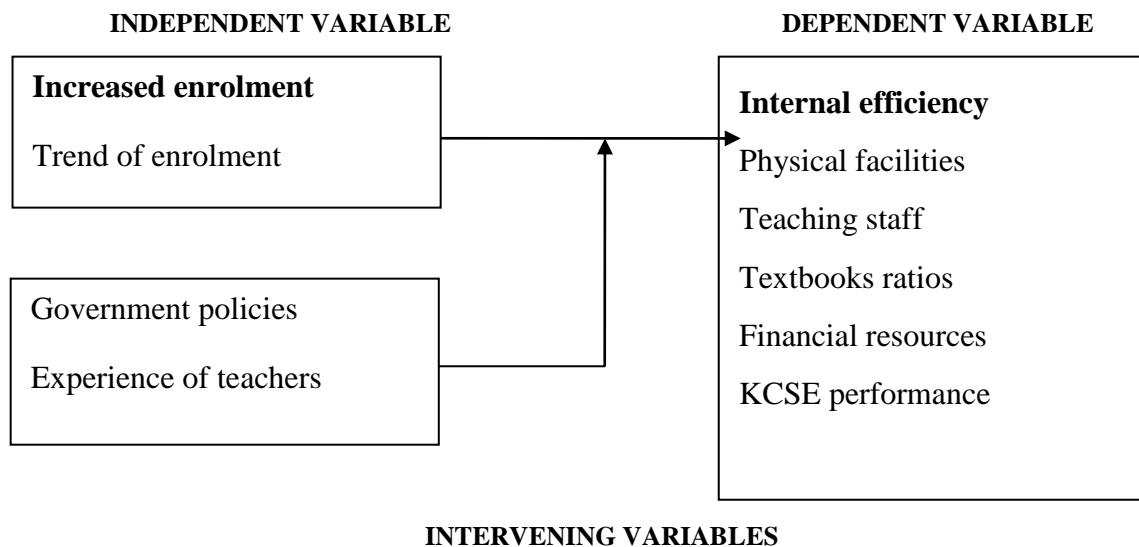


Figure 2.1: Conceptual Framework on Influence of Increased Enrolment on Internal Efficiency

III. RESEARCH METHODOLOGY

Research Design:

This study adopted a descriptive survey design. According to Gall & Borg (2007) this design follows a systematic data collection procedure, determining and reporting things as they are and describing the nature of existing conditions, identifying standards against which conditions can be compared, and determining the relationship existing between specific events. The design enabled the researcher to undertake a detailed study of the influence of increased enrolment on internal efficiency which in themselves could not be measured but their indicators could be used to determine their existence in public secondary schools Kisii Central Sub County.

Area of the Study:

The study was carried out in Kisii Central Sub County of Kisii County. Kisii Central is one of the Sub Counties in Kisii County. It covers a total area of 237.3 square kilometres, with a total population of 381,159 people. The sub county enjoys a rich agricultural potential. The major economic activities include commerce and agriculture in both subsistence and cash crops. It has a few industrial activities and soapstone quarrying. It lies within the latitude 0°41'0N and long 34°46'0E. The Sub County is characterised by the features of the larger Kisii County in terms of socio economic activities and climatic conditions with arable lands. It is also captures urban since it hosts Kisii Town, the sub county headquarter. It has a total of 73 secondary schools of which 60 are public and the remaining are private schools. These schools are both day and boarding secondary schools as is in the rest the country.

The choice of this area of study was based on the fact that the Sub- County is populous thus giving rise to high enrolment in schools. The sub county has various categories of schools too. Besides, no known similar study has been done in the area.

Target Population:

The target population of this study was 60 principals and 240 class teachers of all public secondary schools in Kisii Central Sub County and one Quality Assurance and Standards Officer in the District.

Sample Size and Sampling Techniques:

Gay (1996) suggests that at least 10% of the population is a good representation where the population is large and 30% where the population is small. He observes that a researcher selects the sample due various limitations that may not allow researching the whole population drawn. Twenty of the schools were selected to form the sample. Stratified random sampling was used. This method was chosen in the study because it ensured that the target population is divided into different homogeneous strata and that each stratum is represented in the sample in a proportion equivalent to its size in the target population. This ensures that each subgroup characteristics is represented in the sample thus raising the external validity of the study (Onen, 2004). From the various strata of schools (day schools, boarding schools, single-sex and mixed gender schools), the researcher needed to pick schools that had the requisite characteristics relevant to the study. According to Mugenda and Mugenda (2003) purposive sampling was employed to get 20 school head teachers, 80 class teachers because the researcher needed to get a particular number of class teachers per school, especially if the school had more than one stream. The DQASO in the sub county was also selected. A summary of this is as shown on table 3.1.

Table 3.1 Sample Size Distribution

Respondents	Population	Sample size
Principals	60	20
Class teachers	240	80
DQASO	1	1
Total	301	101

Source: Researcher (2012)

Research Instruments:

Research instruments are tools the researcher used to collect data. The research instruments that were used in the study were questionnaires, interview schedule and document analysis schedule. The selection of these tools was guided by the nature of data that was to be collected, the time available as well as by the objectives of the study.

Questionnaires:

A questionnaire is a research instrument that gathers data over a large sample (Kombo & Tromp, 2006). Orodho (2004), states that the questionnaire method can reach a larger number of subjects who are able to read and write independently. The questionnaire was used since it enabled the researcher to collect data from the respondents within the limited time of the study. It also presented an even stimulus potentially to large numbers of people simultaneously and provided the investigator with an easy accumulation of data. Further, it enabled the researcher to obtain information that the respondents would not be free to give in a face to face interaction. Gay (1996) maintains that questionnaires give respondents freedom to express their views or opinion and also to make suggestions. It is also anonymous. Anonymity helps to produce more candid answers than is possible in an interview. The questionnaires were self administered and collected the same day after they had been filled. They were administered during the month of September, 2012. The questionnaires were used to collect data from head teachers and class teachers.

Head Teachers' Questionnaires:

These were written questions that the head teachers were expected to answer in writing. The head teachers' questionnaires were administered to 20 sampled head teachers. The questionnaire collected information on the following areas: information on enrolment, efficiency in the use of physical facilities, teaching and learning and performance in KCSE examinations. The questionnaire comprised of close-ended items (appendix 1).

Class Teachers' Questionnaires:

The class teachers' questionnaires were administered by the researcher to 80 class teachers. These questionnaires which comprised of closed ended questions sought to find information on: number of text books available in the school, length of time taken to mark and give feedback and number of compositions and 'insha' given and marked per month. The questionnaire comprised of close-ended items (appendix 2).

Interview Schedule:

An interview schedule is an oral administration of a questionnaire, which involved a face to face interaction. The interview schedule was selected for the DQASO because it enabled the respondent to give an in-depth perspective of the areas of concern which would not have been appropriate if a questionnaire was used. The schedule collected information on: length of stay in the station; enrolment trend before and after introduction of FSE; level of adequacy of physical facilities and constraints of enrolment on teaching and learning.

Document Analysis Schedule:

Document analysis is a systematic assessment of communication for purposes of identifying specified characteristics of message (Ogula, 1998). Contents of documents on enrolment trends and KCSE performance in public secondary schools were analyzed to establish the enrolment trend and relationship between candidature and performance in KCSE. It also captured information on financial allocation of subsidized secondary education per student (appendix 4).

Validity of Instruments:

Validity is the degree to which a test measures what it is supposed to measure (Gay, 1996). The researcher sought assistance from the supervisors to determine the validity of the items of the questionnaires. The supervisors scrutinized the content and made necessary changes which were incorporated in the final copies produced.

Reliability of the Instruments:

According to Mugenda and Mugenda (2003), pilot testing ensures that research instruments are stated clearly and have the same meaning to all respondents. It helps refine the instruments so that respondents would have no problem in answering the questions. The instruments for data collection (questionnaires) were piloted in four public secondary schools within a time difference of one week (two schools before and two schools after revision of the questionnaires) that did not take part in the study as a sample. The number of respondents in the pilot study was: four head teachers, 16 class teachers and one DQASO from outside the Sub County of the study. This helped the researcher to adjust the instruments in order to yield the desired response in the actual research.

The researcher then analysed the data. It was noted that some items in both the head teachers' and class teachers' questionnaires were ambiguous and not in tandem with the study objectives. For example, in the Head teachers'

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questionnaire, one of the questions was asking the respondents to give the number of classes instead of classrooms and the number of textbooks in general instead of number of textbooks in specific subject areas respectively. This ambiguity in the head teachers' and class teachers' questionnaires were corrected. Besides, questions on some areas were missing for example questions addressing the last object on the relationship between enrolment and KCSE performance, which were later included. Questions giving information on playgrounds, offices and toilets which had not been captured were incorporated in the questionnaires. The revised questionnaires were re-administered to a different school and collected the same day.

The reliability coefficient of 0.875 which was above the acceptable value of 0.7 was obtained. This was considered appropriate as it indicated internal consistency of items (Ebel & Frieble, 1991).

Data Collection Procedure:

The researcher obtained a permission letter from the Ministry of Education (appendix 6) to collect data. The researcher self administered the questionnaires which were filled and collected on the same day. The researcher also carried out face to face interview with the DQASO and recorded the responses which were later transcribed during analysis. The document analysis schedule was filled by the researcher after perusal of relevant documents provided by the sub county education office.

Data Analysis:

All the items in the questionnaires and interviews were coded for analysis, using research objectives and research questions as guidelines. The statistical package for social sciences (SPSS, 21.0 version) was used. The researcher analysed quantitative data using descriptive statistics and presented it using frequency tables, weighted averages, percentages, pie charts and bar graphs. Qualitative data was analyzed in line with emerging themes and sub themes and was reported accordingly.

Ethical and Logical considerations:

The critical ethical problem in this study was the privacy and confidentiality of the respondents. Obtaining some information which the respondent feels uncomfortable to reveal is an infringement on the privacy and confidentiality of the respondents. This was addressed by the researcher by clearly informing the respondents that the information given would be treated with utmost confidentiality. Further the respondents were that they were free to choose not to answer questions which they deemed infringing into their privacy.

IV. RESULTS AND DISCUSSION

Enrolment Trend of students in Public Secondary Schools between 2005 and 2012 in Kisii Central Sub County:

The first research question responded to was: What was the enrolment trend of public secondary schools between 2005 and 2012 in Kisii Central Sub County?

This question was responded to by the head teachers. Enrolment has been on the rise in the sampled public secondary schools in Kisii Central Sub County as evident in table 4.4.

Table 4.1 Enrolment Trend of Sampled Secondary Schools in Kisii Central Sub CountyN=20

Year	Enrolment BOYS	GIRLS	TOTAL
2003	1686	1681	3367
2004	1782	1736	3518
2005	1801	1796	3597
2006	1814	1803	3617
2007	1823	1822	3645
2008	1893	1910	3803
2009	2015	1996	4011
2010	2306	2273	4579
2011	2674	2638	5312
2012	2828	2756	5584

Source: Field data (2013)

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Table 4.4 shows that in 2003 the enrolment of the twenty sampled schools was 3367, 1686 boys and 1681 girls. In 2004 it was 3518, 1782 boys and 1736 girls. In 2005, 2006 and 2007 the enrolment was fairly constant at 3597 (1801 boys and 1796 girls), 3617 (1814 boys and 1803 girls) and 3645 (1823 boys and 1822 girls) respectively. In 2008 there was a drastic increase in enrolment which was at 3803, 1893 boys and 1910 girls. In 2009 the enrolment rose to 4011, 2015 boys and 1996 girls which later shot by 568 to 4579 (2306 boys and 2273 girls) in 2010. In 2011 and 2012 the enrolment was 5312 (2674 boys and 2638 girls) and 5584 (2828 boys and 2756 girls) respectively. Generally, there was an upward trend in enrolment over the years but a sharp one was noted from 2008 onwards. This rise was associated with the introduction of FSE.

It can be noted from the above data that there was a rise on enrolment. This led to inadequacies in the availability of the human, financial and physical resources. This concurred with the findings in Achieng' (2012), that inadequate physical facilities and understaffing were a hindrance to academic performance. This was further complimented by the data from the sub county education office as seen in Table 4.5 on enrolment trends of all public secondary schools in the entire Sub County.

Table 4.2 Enrolment Trend for Secondary Schools for the Years 2005-2012 in Kisii Central Sub County

YEAR	BOYS	GIRLS	TOTAL
2005	8043	7321	15364
2006	8331	7449	15780
2007	8502	7503	16005
2008	9989	9426	19415
2009	10795	10532	21327
2010	11352	11013	22365
2011	12745	10135	22880
2012	12094	11395	23489

Source: DEOs Office Kisii Central (2012)

The document on enrolment as presented in Table 4.5 gives information on enrolment per gender in public secondary schools from the year 2005 to 2012 in Kisii Central Sub County. From the information, there was a general increase in enrolment over the years. On the FSE allocation, it was noted that the student capitation per year remained constant, at Ksh 10,625 since its introduction (MOE, 2012). This implied that adequacy of the financial resource remained a challenge over the years, amid the inflation despite the increasing enrolment trend. This negatively affected the internal efficiency in running the school programmes since the funds were not adequate in buying teaching and learning resources. This agreed with Boru, (2013) that inadequate teaching and learning materials affected teaching and learning and hence internal efficiency.

When asked to comment on enrolment in relation to internal efficiency in public secondary schools in the Sub County between 2008 when FSE was introduced to date, the DQASO said:

“Madam, in this district people don’t sleep. They are busy filling the earth making the enrolment to soar high in their schools. What is encouraging, they are taking their children to school, both boys and girls. In fact, they are even starting secondary schools in every primary school and this is a challenge in getting teachers to teach in these schools.”

Asked to compare the current enrolment trend with that of the period before the introduction of FSE in 2008, the respondent said:

“From 2008 the enrolment was higher than the period before 2008. This can be attributed to the FSE which gave a chance to many children who had dropped to go back to school.”

From the responses given by the respondent, the DQASO, it was evident that the respondent had stayed long enough to have vast knowledge of the sub county on matters of enrolment, enrolment constraints affecting internal efficiency and how the provision of facilities affect internal efficiency in public secondary schools. Further, the respondent opined that there was increased enrolment which led to the strain on available resource both human and physical, which in turn negatively affected the process of teaching and learning because of the discomfort of the

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learner. This implied that internal efficiency was not achieved because of inadequate teachers a strain on the available resources. This agreed with findings by Hussain, et al (2012) and Khan (2012) that educational facilities were not adequate in the schools at the secondary level which is the main hindrance in acquiring quality education, and that adequacy and suitability of the learning environment was necessary for better performance respectively. Further, inadequate teachers which is an indicator of internal inefficiency, was noted to affect internal efficiency. This concurred with a study by Komba et al (2013) that among others, limited number of teachers per subject to be taught and number of students affected performance as an indicator of internal efficiency.

The Relationship between Enrolment and KCSE Performance for the Years 2008-2012 in Kisii Central Sub County:

The fourth research question responded to was: How does increased enrolment relate with KCSE performance, as one of the indicators of internal efficiency, for the years 2008-2012 in Kisii Central Sub County?

The study sought the views of the head teachers on the relationship between enrolment and performance in KSCE in public secondary schools in Kisii Central Sub County. The results were as presented in table 4.22 below.

Table 4.3 Candidature and KCSE Performance in the Sampled Public Secondary Schools in Kisii Central Sub County between 2008 – 2012N=20

Year	Candidature	MSS	Quality grades
2008	1199	5.231	318
2009	1207	5.1953	364
2010	1231	5.003	405
2011	1275	5.098	532
2012	1298	4.9531	547
TOTAL	6210	5.096	2166

Source: Researcher (2013)

Table 4.22 shows that in 2008 the candidature was 1199 with performance M.S.S of 5.231 and 318 quality grades. In 2009 the candidature was 1207 with performance M.S.S of 5.1953 and 364 quality grades. In 2010 the candidature was 1231 with performance M.S.S of 5.003 and 5325 quality grades. In 2011 the candidature was 1275 with performance M.S.S of 5.098 and 532 quality grades. And in 2012 the candidature was 1298 with performance M.S.S of 4.9531 and 547 quality grades.

From the results in table 4.22 there was an inverse relationship between candidature and performance in that as candidature increased, KCSE performance decreased over the years. For instance, in 2008 with a candidature of 1199 the MSS was 5.231 whereas in 2012 with a candidature of 1298 the MSS 4.953 this translated to an 8.26% increase in candidature leading to a negative deviation of 0.278 (5.31%). This negative deviation was attributed to strain on the available resources leading to low learning outcomes hence low internal efficiency. This partially concurred with Bullard (2011) that school enrolment size had a small but not substantive effect on average student academic achievement.

The results from table 4.22 were further complimented by the documents analysed from the sub county education offices on the sub county KCSE performance trend for 2008-2012 performance as presented in table 4.23 below.

Table 4.4 Kisii Central Sub County KCSE Performance Trend for 2008-2012

YEAR	Candidature	M.S.S
2008	6173	3.829
2009	4826	4.5384
2010	4570	4.9905
2011	4912	5.1594
2012	5033	4.506

Source: District Education Office Kisii Central Sub County (2013)

Table 4.23 shows that in 2008 the candidature was 6173 with performance M.S.S of 3.829. In 2009 the candidature was 4826 with performance M.S.S of 4.5384. In 2010 the candidature was 4570 with performance M.S.S of . In 2011 the candidature was 4912 with performance M.S.S of 5.1594. And in 2012 the candidature was 5033 with performance M.S.S of 4.506.

V. CONCLUSION

The study established that there was a general increase in enrolment. For instance, enrolment in 2005 (before FSE) the enrolment was 15,364, which increased to 19415 in 2008 (after FSE) translating to 26.55% increase. It increased further to 23,489 in 2012 translating to 20.98% increase. There was an upward trend in enrolment over the years but a sharp one was noted from 2008 which marked the introduction of FSE.

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