

Level of Internal Efficiencies in Public Primary Schools in Keiyo North Sub-County, Elgeyo Marakwet County, Kenya

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Abstract Internal efficiencies arise partly because of the management of the education. The main objective of the study was to explore stakeholders' influence on internal efficiency of the primary school management system. The study was based on the production function model postulated by Hanushek, where production function refers to the process by which educational inputs are converted to education outputs. The study targets an estimated 55 head teachers, 645 teachers, 17 executive members of School Management Boards and 3 Quality standards and assurance Officers in Keiyo sub-county. Simple random sampling was used to select a sample size of 228 respondents. Data collected was coded into SPSS Version 16 for windows and descriptive generated and interpretations made. Research findings were presented using frequency tables and charts. The study findings revealed that there is low internal efficiency in primary school educational system which has significant association with the roles of the stakeholders.

Keywords Internal efficiencies, Wastage, Input and Output

1. Introduction

An efficient educational system should enable pupils to graduate within the standard frame. Internal efficiency is a distinctly important issue of school education. According to Nepal National EFA assessment (2000) that had computed internal efficiency of Nepal for up to 1997, the internal efficiency coefficient had been very low. The survival rate to grade 5 has remained at about 45% and the coefficient of efficiency up to grade 5 has remained at 42% from 1991/2 to 1996/7. The grade repetition rates at grade 1 and grade 5 have remained at about 41% and 18% respectively for the period 1991-97. The low efficiency rates in school education have caused huge national resource wastage as well as hindering the efforts of achieving quality basic education for all. In order to address the issues, Nepal has, given special focus on quality and efficiency of primary school education in the basic and primary education program.

The government of Kenya, through FPE initiated a program that was intended for the children from disadvantaged backgrounds. The intention was to see to it that children who could not afford to go to school because of the small levies that were being surcharged at that time

would get opportunity to be in school because the primary school education was to be for free. This initiative saw a rise in the enrolment rate in primary schools with figures almost going double. But with this success, there are cases where the students who went to school have not remained there in.

Preliminary, investigations at the District Education Officer (DEO) office reveal that there is evident of educational wastage in Keiyo North, Sub County. There are numerous cases of pupils enrolling into the primary education system but do not complete the cycle. These suggest that pupils drop at various stages of the education system, especially in standard six, seven and eight. During the 2013, education day, the DEO mentioned pertinent education issues in public primary schools in the district. The issues revolve around enrolment and dropout cases. This has attracted interests from stakeholders, particularly after the inception of Free Primary Education in the year 2003. According to the education officer, in the past five years, statistics reveal that following FPE, high enrolment rates were recorded initially, particularly at the lower primary. However, years later as the pupils progressed in the primary education cycle, there were cases of high dropout at upper primary. In addition statistics obtained at the Education Policy Data Centre (EPDC) office for the year 2007, the average dropout rate for class 1 to 8 stood 40% (EPDC Kenya District Profile for Keiyo, 2007). Other than the dropout rate, internal efficiencies in an education system

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manifest itself in high repetition rates, poor grades, and transition rates.

2. Literature Review

Efficiency is the connection between inputs and outputs in a process. Systems are deemed efficient if the input yields the full output. Relative efficiency within education system is usually measured through private and social rates return. The educational progress of all students regardless of family background and economic status is the key indicator of efficiency in schools and it includes but not limited to effective pedagogy, classroom climate, school philosophy and headship, improvement and reform programmes and system wide policy and reform (Ishumi, 1994). Internal efficiency is a landmark of each organization, especially educational institution. It gives the organization a mirror of operation system. If educational institutions are more efficient within, they have their good results and the students who pass from such institutions get good careers for bright future. Internal efficiency is mainly affected by several factors particularly drop-out, retention, promotion, and cycle completion (Subedi, 2009).

Jimenez, Lockheed, & Wattamawaha, (1988) noted that efficiency is measured by comparing education expenditures with education outcomes. Government makes expenditures at all levels of education, and two of the most basic efficiency questions are whether government is spending the suitable amount on each level or type of education and whether government is making the proper choices on quantity versus the quality of education. According to Karani *et. al* (1995), the analysis of efficiency in education is necessary in ensuring optimal use of the insufficient funds allocated to education in order to reduce wastage. Analysis of efficiency in education has generally been based on the cost at which the output is optimized. For example: if the students' mean score in national examination is A in schools A and B, but it is achieved at a higher cost in school A than in school B, it is therefore concluded that the school A is more efficient than school B. While this kind of analysis would suffice in a closed analysis model, extra and intra-school inputs which are also important in assessing school productivity (*ibid*).

A study by Kothari (2004), revealed that primary education had internal efficiency problems such as the high wastage because of the low completion and high repetition rates. In this connection, dropout and repetition rates were higher in upper classes, standard 5 to 8. Every year, about 10% of pupils from each class fail to move onto the next, resulting in the high cumulative loss experienced by standard eight. In 1993, for example, the boys and girls enrolled in standard one were 472.5 and 384.2 thousand respectively, however, four years later only 372.9 and 364.2 thousand boys and girls respectively. In some cases, teachers' negative attitudes tend to push pupils, especially girls, out of school.

These pupils are at times neglected, abused, mishandled and sent out of class during teaching or learning periods. Such environment or atmosphere is not conducive for learning and makes some children hate school. This scenario promotes absenteeism or truancy, poor performance and non-completion of the education cycle. Several studies have highlighted sexual harassment among girls and pregnancies as a major contributor to retaining the girl child in school (Ngila *et. al* 2014, Kosgey, 2011). There are cases where girl pupils are forced or induced into engaging in sex. Reports by the forum for African women educationists (FAWE) indicate that more than 12,000 girls drop out of Kenya's schools yearly due to pregnancy. Such a hostile environment has two negative effects; it discourages parents from sending their daughters to school or encourage them to pull them out of school and pupils lose interest in education and fall pregnant, and are kicked out of the school system altogether (Odaga, 1995).

3. Methodology

Descriptive survey research design was adopted for the study. The design was deemed suitable for the study for it enabled the researchers to easily collect data from many respondents. Data on role of stakeholders in enhancing internal efficiency in public primary schools was cost effective and feasible in terms of time.

The target population for this study consisted of all the Head teachers, teachers, and executive members of School management boards of 58 schools in the sub county. The estimated numbers are 58 school heads, 645 teachers, 165 members of school management board and 4 QUASSO officers.

The study used proportionate sampling to select 232 participants. This formed 30% of target population, which is in line with Gay's (2003) recommendation. Using proportionate sampling, there were 17 SMBs and 194 teachers and 4 QASO Officers who were selected using census sampling.

The study used four instruments which included questionnaire, interview schedule, observation and document analysis. Data was collected by use of interviews conducted with the head teachers while class teachers were issued with questionnaires and extraction of data from the class registers and other source documents were done with the aid of a research assistant.

The instruments were piloted to ascertain their validity and reliability. This was done by distributing twenty (20) questionnaires to the teachers in the two schools in the Neighbouring Marakwet west sub county, which was not part of the schools sampled.

The study used Cronbach Alpha method to test reliability. The acceptable standard measurement so calculated was 0.7 which is acceptable.

4. Results

Respondent's Gender and Age

The study was interested to know the age bracket of the selected respondents in order to ascertain how mature the respondents were, the findings are summarized in table 4.1.

Table 4.1. Gender participation

Gender	Head teachers		Teachers	
	Frequency	Percentage	Frequency	Percentage
Male	12	70.6	107	55.4
Female	5	29.4	87	44.6
Total	17	100	194	100

In the head teachers category 12 (70.6%) were male and 5(29.4%) were female head teachers, whereas in the class teachers category 107(55.6%) were male teachers and 87(44.6%) were female teachers. From these study findings, it is observed that male teachers are still dominant in leadership as well as formal employment. Majority of the head teachers 12 (70.6%) were male as compared to 5(29.4%) female head teachers. On the other hand, male teachers were still dominant in terms of numerical strength, 55.4% males compared to 44.6% females.

Levels of Internal Efficiencies in schools

The study sought to determine the levels of internal efficiencies of the selected schools. This was done by computing the promotion rate, repetition rate and dropout rate of students in the schools between 2005 and 2010. Source documents were used to extract data on the number of promotes, number of repeaters and number of drop out. A cohort of 6,670 students in Class 4 in 2005 who graduated in Class 8 in 2009 from all the schools was used, since performance would be gauged based on their KCPE examinations, noting that it is the standard exam that we can use to evaluate the efficiency of the system. The data collected were analyzed using frequency count and percentages. The findings are presented in table 4.2.

Table 4.2. Levels of Internal efficiency

	Class 4	Class 5	Class 6	Class 7	Class 8
	2005	2006	2007	2008	2009
No. of students examined	33770	32751	4452	4194	4034
No. of repeaters	981	920	125	15	-
No. of drop outs	1004	1260	640	105	12
No. of promotees	31770	30572	3672	74	23
Graduates	0	27040	3618	55	23

As indicated in table 4.2, the number of promotes in the public primary schools in Keiyo North Sub County, was high in each of the years. Although, the cohorts of 33770 pupils were in class 4 in 2005, the number of pupils reduced in 2006 to 32,751 as a result of repetition and drop out. The number of repeaters reduced from 981 in class 4 in 2005 to 15 in

class 7 in 2009. The number of drop out was at a fluctuating trend in each of the years from class 4 in 2005 to class 7 in 2008. The years 2006 to 2010 accounted for the extra years spent by the repeaters and drop out who were yet to leave the school system. Computation of the promotion rate, repetition rate and dropout rate in schools indicated that the internal efficiency stood at 35.5%. This low coefficient of efficiency shows that primary schools in the sub county are internally inefficient.

5. Discussion

From the study the number of promotes in the public primary schools in Keiyo North sub county, was high in each of the years. Although, the cohort of 33755 pupils was in class 4 in 2005, the number of pupils reduced in 2006 to 32,751 as a result of repetition and drop out. The number of repeaters reduced from 981 in class 4 in 2005 to 15 in class 7 in 2009. The number of drop out was at a fluctuating trend in each of the years from class 4 in 2005 to class 7 in 2008. The years 2006 to 2010 accounted for the extra years spent by the repeaters and drop out who were yet to leave the school system. Computation of the promotion rate, repetition rate and dropout rate in schools indicated that the internal efficiency stood at 35.5%. This low coefficient of efficiency shows that primary schools in the sub county are internally inefficient.

6. Conclusions

The poverty level in the study area have made most of the parents earn low income making them not in a position to provide basic needs to their children, others involve their children in performing household and domestic chores limiting them from accessing education always as they skip regular schooling. The domestic problems and violence in homes demoralize the students from going to school as they create truancy and finally leading to absenteeism.

The disparity in dropout rates among the boys and girls may be attributed to poor learning environment they are brought in, incidences of child abuse and domestic violence, early pregnancies, ignorance amongst the parents on education, cultural practices such as initiations, domestic violence in families and poverty stricken families. The resource allocations to both various levels of education and different inputs such as instructional materials, classroom management and teaching-learning contact hours, utilization of school physical facilities such as text books, classrooms and desks, transparency and accountability on school management and resource utilization and performance in national examinations such as KCPE were indicators of efficiency in primary schools. The school factors that affect internal efficiency in primary schools included the low enrolment, high repetition, absenteeism and drop out of schools.

7. Recommendations

Based on the findings of the study, the following recommendations are made:

- 1) The county government should put measures in place to ensure that all children in the county attend and stay in school to complete basic education.
- 2) Parents should also strive to provide basic needs such as food, clothes, shelter to their children and motivate them to excel academically.
- 3) Teachers and other officials in the county should undertake capacity building to create awareness on the parents about the importance of educating a child.
- 4) County education officers should ensure that inspection in schools are done regularly.

8. Future Research

The study recommends other studies to be done on the factors that affect enrolment, repetition, dropout in primary schools in Elgeyo Marakwet and other Counties in Kenya.

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