

Effect of Teacher Attrition on Academic Performance of Students in Uasin Gishu County, Kenya

Sr. Mary Theodora Mabeya, Margaret Gikuhi (PhD) & Ntabo Jared Anyona (PhD)

School of Education
Catholic University of Eastern Africa
P.O. Box 62157-00200 Nairobi, Kenya

Abstract

The study was on the effect of teacher attrition on students' academic performance in public secondary schools of Uasin-Gishu County, Kenya. The study employed a mixed research design, which included naturalistic and descriptive survey designs. The target population comprised all public secondary school teachers in Uasin-Gishu County, County Education officials, teachers who had left teaching and form 3 and 4 students. Data collection instruments included Questionnaires for teachers and students, interview schedule for County Education officials and document analysis guides. Analysis of data has been through use of descriptive and inferential statistics. The study revealed that there existed a positive correlation between teacher attrition and students' academic performance, which was statistically significant. It was also established that attrition has a negative effect on students' academic achievement as it increases teachers' workload, shortages, curriculum implementation, creates poor image on teaching as a profession and denies students' future career. . The study therefore recommended that the Ministry of Education and the Teachers' Service commission should employ more teachers. The school principals should therefore make fair decisions and promote open discussions when dealing with teacher issues in order to use the feedback from teachers to improve any strained relationship.

Key Words: Teacher, Attrition, Academic, Performance, Students

Introduction

Education is fundamental to socio-economic development of a country as it imparts skills and knowledge in learners and prepares them to take up roles in national development (Darling-Hammond, 2010). Craig (2014) established that shortage of well qualified teachers in schools is an important aspect in students' learning processes in both developed and developing countries. According to Ndoye, Imig and Parker (2010), teachers who are effective in teaching are significant to the contribution of quality student accomplishment. However, it has become increasingly difficult to retain them in classrooms due to resignation and migration to other professions an issue that affects performance in the Education. In particular, secondary schools around the world continue to experience, teacher attrition and shortages an issue that has become critical and of great concern for policymakers and school administrators.

Globally, there is growing concern on teacher attrition in secondary schools in various countries. In the United States of America, the teaching profession has the highest number of members. The number outweighs that of registered nurses and five times that of lawyers (Darling-Hammond, 2016). Coming to Asia, UNESCO report (2011), established that in Pakistan teacher attrition surfaced as a significant problem, which affected school performances. In Namibia, UNESCO (2016) established that a total number of teacher

attrition rate was of 11.7%, while other reports from the World Bank indicated that between 2006 and 2007 attrition ranged from 2% to 10% (Mulkeen, 2010). In Ghana, the report by the World Bank (2012) found increase of 60% in teacher attrition rates of secondary school teachers and gradually the proportion dropped to 53% from 72% in 2013. Oyaró (2008) indicated that 600 teachers had left the profession in Kenya between January and June 2008 which was approximated to three teachers leaving the service every day for greener pastures. UNESCO (2012) report placed the teacher shortage in Kenya at 61,235 for both primary and secondary schools. The report from the County Education Director's Statistics report indicated serious shortage of teachers in public secondary schools in the County (Uasin-Gishu County, 2017). From the report in the year 2012, 10% left the profession, in 2013 and 2014 13%, while in 2015 and 2016 combined the figure was 12%. This is an indication that public secondary schools in the County are in dire critical situation need of teachers. This shows that there exists a problem of teacher attrition in secondary schools in the country. This paper makes further attempts to determine the effect of attrition on academic performance of students in public secondary schools in Uasin Gishu County, Kenya.

Statement of the Problem

With the increased rate of teacher attrition in schools in the country for the past ten years (from 2008), academic performance of public secondary schools students in KCSE examinations has been on a decreasing rate over the past five years (2012-2016) in Uasin Gishu County. It was not known whether the decreased academic performance by students (due to reduced number of students being admitted to universities) could be as a result of teacher attrition. This study therefore analysed the influence of teacher attrition on academic performance of students in public secondary schools in Uasin Gishu County, Kenya.

Objective of the Paper

The main objective of this paper is to determine the effect of attrition of teachers in secondary schools on student academic performance in Uasin Gishu County, Kenya.

Literature Review

Teacher attrition does not simply mean a numerical loss but represents the loss of experienced teachers from the system (Mulkeen, 2010). This is particularly in cases where those who are leaving the profession are the most successful or qualified teachers. As Xaba (2003) states that teacher turnover and attrition translated amongst other things, into shortage in educator supply, costs in recruitment, training and mentoring, poor learner achievement due to disruption of planning programs and continuity, as well as overcrowded classes. This to him poses a major challenge to the education sector in managing and retaining teachers. Several approaches have also been used to address the concept of performance, as an assessment on a students' academic failure. Some of the approaches have negative connotations on the learners themselves and the school at large. However, according to Ingersoll (2012) there are different measures that could determine success or failure in the learners' academic achievement.

Grissmer (2006) describes students' academic performance as any performance that falls below or above the desired standard. According to Grissmer, apart from the presence of a teacher the class size creates student – teacher bonding which seems to have a positive effect on student success. A World Bank Report (2010) on school and classroom influence on student learning in Thailand reported schools with the support of all stake holders perform better than where there are wrangles within the system. In the education arena, the ability, hard work and commitment of teacher contributes to quality of teaching and learning in

schools. If a teacher detaches self from the current rapid scientific technology and educational developments becomes redundant, inefficient and ineffective in the arena (Salifu, 2014). A teacher's professional advancement entails achievement of new skills and expertise for career advancement and personal fulfilment.

In a research study carried in US by Ingersoll, Merrill and May (2014), found out that high rate of teacher mobility had a negative impact on the efforts schools put on improvement of quality of teaching and learning in the education system as it disrupted the stability and continuity of teaching. The report further revealed that teacher mobility, which involves teacher transfer, was strongly associated with teacher turnover in schools. This was of great concern in the United States and needed urgent address. The study reported that America was spending over a billion dollars on teacher retention. In another survey study by Craig (2014) in the United States, whether teacher turnover affects students' academic performance in the United States found out those schools with the highest rate of teacher turnover responded to the shortage by employing ineffective teachers at the prevailing wage to fill the vacant positions.

Koech (2011) postulates that there is consensus among scholars that organizations which experience employee turnover either benefit or suffer the cost depending on various factors that influence the turnover. In most cases, these factors are very disruptive and costly when their effects are not identified and really maintained to a minimum. However, if maintained, the quantity of teachers will assist improve the learners' academic achievement and subsequently enhance productivity in the organization. Armstrong (2009) argues that a high turnover in an organization is a sign of a problem in that organization and brings about negative publicity to the organization creating dissatisfaction amongst employees. However, employee turnover is a common organizational problem facing both the public and the private sectors but in recent years, this phenomenon has increasingly become important in debates about the teaching profession. He observes the reason is that turnover reduces the quantity of teachers available in many schools, and hence aggravating professional teacher shortages. At the same time, it affects the quality of teachers, especially if the best teachers are the most likely to leave.

In a survey study carried out on Teacher Attrition and Mobility in the United States by Goldring and Riddles (2014) revealed that levels of teacher attrition had unyielding implications on the quality of teaching. In addition to all this, a limited supply of teachers increases the need and likelihood for out-of-field teaching, where teachers teach subjects in which they are neither prepared in nor qualified to teach. This obviously leads to poor academic performance and creates redundancy in students who want to specialize in certain professional careers and creates a detrimental effect on the teachers' morale and, indeed, leads to a loss of public confidence in the teaching profession generally. In the United States, NCTAF (2007) established that due to high teacher attrition, high-need of teachers in both urban and rural schools were staffed frequently with inequitable under-prepared, inexperienced teachers who are left to labour on their own to meet the needs of their learners. This isolation had an effect on the new teachers who felt overwhelmed by the challenges they faced. They also in turn left after few years of working under a frustrating environment with lack of mentoring. These teachers either moved to better schools that had induction programmes, but in most occasions, abandoned the teaching profession altogether. However, after leaving, the gap took long to be filled and a host of problems encountered by the enthusiastic young teachers assigned to take over the positions, which ultimately affected the academic performance of the institution.

In Pakistan, Noor (2015) assessed how teacher transfer influenced students' academic performance, found that high rate of teacher transfer influenced students' academic performance an issue that threatened the education system of Pakistan. The study further established that transfers of natural science teachers were higher than of social sciences. This created an assumption that science subjects are more complicated and demanding than social science subjects, which can be taught by less skilled personnel. Thus, lack of natural science teachers dilutes the performance and which makes the recruitment for the science teachers insufficient and does not fulfil the students' career development. In contrast, Ingersoll (2012) argues that some teacher turnovers (attrition) are good for schools that do not help students achieve their academic goals should leave the classroom. Unfortunately, ineffective teachers are not the only ones who exit through the teaching's revolving door, but high quality teachers who struggle to improve the students' academic achievement are among those that mostly leave. Seen from the perspective of systems theory, an increase in the attrition of the teaching staff in sub-Saharan African public schools, which are subsystems of an open system, places the education system at risk of lower teacher quality. The greater inequity in student opportunities, an increased inefficiency as more funds are diverted to recruiting and training new teachers.

In South Africa, Pitsoe (2013) alluded that high teacher attrition can cause problems on educational quality, equity and efficiency. Utah Foundation (2007) contributing to the same issue attributes that the high number of inexperienced teachers in the classrooms is contributed by teacher attrition. In addition, attrition contributes to unequal distribution of quality teachers across learning institutions. Ingersoll (2012) observes that the most disadvantaged students attend schools with the highest number of teacher turnover are replaced with the lowest quality teachers. The observation seems to support Meyer and Furlong (2010) who articulates that the quality of a teacher has a lot of influence on the academic achievement of a learner than any other school-related factor. Mulkeen and Crowe Taft (2010) established that schools find it hard to replace teachers who have left the profession and forced to operate at least for a period, with a reduced number of staff before the gap is filled. The scale of the disruption caused by attrition is enormous. IEQ (2009) carried out a study in Malawi on the effect of teacher migration on students' quality of learning. The study found that, of the 188 teachers who began the school year, almost 50 percent were not teaching the same class nine months later. Some had moved to other schools or left the profession; others were no longer in their classrooms due to illness or other temporary absences. These finding clearly shows a disruptive effect on the academic performance and the damaging effect on the student-teacher relationship as well as class planning and other activities. Buchanan (2012) argues that the departing teachers carry along with them a considerable knowledge, skills and experience.

Ingersoll and Perda (2010) in their study found that teacher attrition is a major problem on students' performance but it is often an overlooked factor behind shortages of mathematics and science teachers. It was an observation made, that due to the deployment patterns, some schools, especially those in undesired areas suffer shortage of teachers for significantly longer period given the delays in looking for a replacement. Ingersoll and May (2012) expounds that some teacher turnover issues is inevitable and even beneficial to the institution, since some teachers join the teaching profession as step gate for greener pastures. In this case, such teachers are ineffective and eventually discover that teaching is not a right profession for them; others leave to pursue administrative posts in banks or other education related roles elsewhere. National Commission on Teaching and America's future, (2013) established that excessive teacher turnover is costly and detrimental to institutional cohesion in schools as it is

not free. As such, to ensure that qualified teachers, specifically in the main subjects where all learners are involved, retention is an important concern.

In Kenya, Kizito, Chumba and Kindiki (2010) carried out a study on the trends and effects of teacher attrition on secondary school education in Kenya: A case of Kisumu City. The findings revealed that a teacher who stayed in one school for a reasonably longer period was more efficient, productive and enthusiastic than those who changed schools frequently. A research on factors contributing to poor performance in the Kenya Certificate of secondary Education examinations in public Day secondary schools in Mwimbi Division by Reche, Bundi and Nthia (2012), established that teacher transfer, be it classroom or administrative had a great influence on learners’ achievement in terms of team work, cohesion in the teaching processes. It also revealed that when a school principal’s work becomes exceptionally regulated, a host of inadvertent negative performance occurred which resulted to job dissatisfaction, burnout, and loss of self-esteem. A study by Ruto, Kapkia and Kiprof (2016) on the effect of head teacher’s turnover on teacher performance in public primary schools in Turbo Division. The study was guided by the Hertzberg’s motivation- hygiene theory of job satisfaction. It adopted descriptive survey design and targeted 684 teachers and 85 head teachers. The study found out that there was a statistically significant relationship between head teacher’s turnover and teacher performance in primary schools. The review of literature studies show existence of research gap on how teacher attrition influence academic performance of students in public secondary schools in Uasin Gishu County.

Materials and Methods

The study adopted a convergent parallel mixed methods research design. The quantitative and qualitative methods complement each other, and provide for the triangulation of findings, hence greater validity of the emerging inferences. The research was carried out in Uasin Gishu County which is one of the 47 counties of Kenya. The county has six Sub- Counties namely; Ainabkoi, Kapseret, Kesses, Turbo, Soy and Moiben. This study targeted 166 public secondary schools, 2732 form 3 and 4 students, 1792 teachers, 166 principals and 6 County Education officials in Uasin-Gishu County. . The researcher chose to involve 30 teachers who had left the teaching profession for other reasons different from natural attrition and normal retirement. To determine the sample size for principals, 10% of the total population was used to act as a sample size. Data was collected using a questionnaire, interview schedule and document checklist. Data from the field was analyzed using qualitative and quantitative techniques. Data were analysed using descriptive statistics for all quantitative data. Qualitative data from the open-ended questions and the data from the interview schedule were analyzed thematically and used the grounded theory procedures.

Results and Discussion

The researcher sought further information from the sampled principals and teachers on the number of teachers who had left their schools in the last two years (2015 and 2016). The summary is on Table 1.

Table 1 Number of teachers who have left school in 2015 and 2016

	N	Min	Max	Mean	STD
Number of teachers who have left	218	1.00	14.00	3.2890	2.14325
Valid N (List wise)	218				

Source: Field Data (2017)

The mean score was calculated using SPSS. To the higher value, 218 out of 273 of the teachers as shown on the table reported between 1 to 14 teachers had left their schools in the

two years 2015 and 2016. The accumulative mean average was at (M= 3.28 and SD=2.14,) as reported by the respondents. This shows that on average the County loses 80% teachers annually. This was in consistent with the observation from the teachers who had left teaching and the secondary data collected from the County Director of Education office, which showed the shortage number of teachers in the County. In an interview session, one of the Education (TSC) official expressed concern over the current situation of teacher shortages and the rate of attrition in the county. Here is an excerpt from the official;

...Sure, teachers are posted to schools in this County but after few months they either resign or ask for transfers. As a representative of the employer who is supposed to be on the defensive side, my respective sub- county is not that much affected by teacher attrition as envisaged, but what we are experiencing is a shortfall in the number of teachers. Although the Teachers Service Commission (TSC) has tried to commence hiring and posting teachers to the affected schools but still the gap is big (Interview Conducted on 20th September, 2017).

The findings as shown from the Education officials’ sentiments, is a strong manifestation that actually the study area has attrition problems, although he tried to downplay the issue as not a big problem in the county. All the sampled education officials expressed similar sentiments. However, the findings do not imply that the issues related to attrition are unique to Uasin-Gishu County in particular.

Effect of Teacher Attrition on Students’ Academic Performance

In order to find out the effect of attrition on the students’ academic performance, the students, teachers, sampled principals and the education officials were asked to indicate whether attrition had any effect on the students’ academic performance. This was to be indicated as; strongly Disagree, Disagree, Undecided, Agree, strongly Agree. The findings are in **Figure 1**.

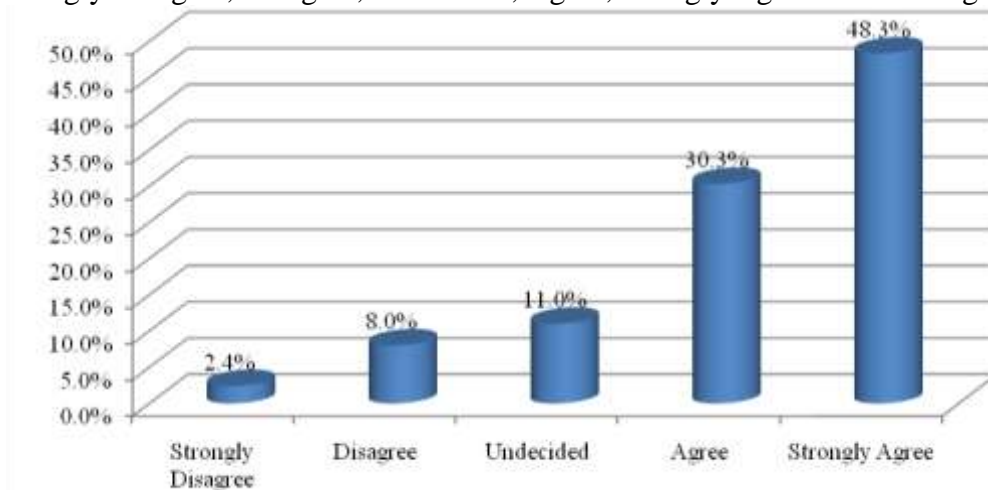


Figure 1: Influence of Attrition on Academic Performance of Students

The findings indicated on average majority 79% of the students agreed that teacher attrition affected their academic performance; a considerable number 32% disagreed while only 11% were undecided. This was in line with what the teachers, sampled principals and County Education officials agreed on, that attrition does not just affect students’ academic performance but also the quality of teaching and learning in schools. Most of the key informants observed that if the attrition issues are not maintained, then the Kenya might not attain vision 2030 effectively as the Education sector is in danger in public schools.

Extent on how Teacher Attrition affected Students’ Academic Performance

Studies have shown that teachers play an important role in the students’ academic performance in the education system (Rivkin, Stephen, Ertik & John, 2000). A study by Chumba (2014) on principals’ mobility in Kenya revealed that teachers are an important resource in the teaching/learning process and their training and utilization therefore requires critical consideration. Owing to the importance of teachers’ participation in learners’ academic performance, the researcher sought to examine the extent at which attrition affected students’ academic performance. The findings are in the following sub-topics. The teachers on duty were asked to indicate their views’ on the extend teacher attrition affected students’ academic performance. The answers were rated as; highly likely (5), likely (4), undecided (3), less likely (2) and Not likely (1). The results of the analysis are in Table 2.

Table 2 Views of Teachers on the Effect of Attrition on Academic Programmes in Schools

Variable	N	Mean	Std. Deviation	Rating
Leads to heavy workload	273	3.1612	1.57754	Highly Likely
Creates teacher shortage	273	3.3956	1.54738	
Leads to lack of syllabus completion	273	3.8205	1.53657	
Interferes with the school reforms	273	3.3480	1.51699	Likely
Affects curriculum implementation in schools	273	3.0549	1.50511	
Creates negative attitudes towards the profession	273	3.3333	1.49591	
Interferes with teacher balancing	273	3.2857	1.49960	Less likely
Leads to poor academic performance	273	2.9927	1.47527	
Contributes to lack of cohesion in teaching	273	3.3004	1.47201	
Remaining teachers are de-motivated	273	3.0476	1.42248	Undecided
Inadequate preparation due to workload	273	2.9704	1.42959	
Denies other teachers opportunities for progression	273	3.0183	1.41279	
Quality of teaching and learning is compromised	273	2.9963	1.36527	Not likely
Valid N (List wise)	273	3.2096	1.49665	

Source: Field Data (2017)

The range of the mean in Table 2 shows (M=3.8 and SD=1.57), where teachers reported that it was highly likely that teacher attrition increased the workload, lead to poor academic performance and incompleteness of the syllabus. This indicates that when teachers leave schools, students’ ratio increases. In cases where teachers leave without any record of work covered, the syllabus may not be completed and therefore leads to poor academic performance. The least ranked item was that quality of teaching and learning would be compromised (M=2.97 and SD=1.42), Average statistics shows that majority of the teachers were undecided (M=3.20 and SD=1.49) on whether attrition lead to inadequate preparations and denied others opportunities for career progression. The findings were in line with the students, Teachers who had left the profession, Principals and the county Education officials. The effects could be either negative or positive. However, there were some teachers, principals and education officials who disagreed and argued the syllabus could only be affected depending on the commitment of the teacher who leaves.

Another number 78% of the teachers indicated that attrition contributed to work stress when the few teachers left are forced to combine classes, which made students’ evaluation difficult.

The observation from the respondents indicated that the classes were very uncomfortable for a learning environment as it was even difficult for students to write. The findings were in line with what majority 87% of the students reported. The students however observed that it was difficult to interact with their teachers on personal class problems. On the syllabus coverage, some principals and County Education officials gave various responses on the effects of attrition. Never the less, most of the observation was in line with that of students and teachers who had left the profession observed. There were few keen observations made by some key informants. For instance, one of the Education officials had this to say.

Syllabus coverage is affected as when a new teacher is posted to a school must prepare a lesson plan, scheme of work and also lesson notes leading to wastage of instructional time... continuity is also not a prerequisite as some teachers exit schools without leaving any record of work covered behind” (Interview Conducted on 24th September, 2017).

The findings as gathered from the sentiments show that there are situations when a teacher decides to quit abruptly without handing over the record of work covered and when a new teacher reports, spends a lot of students’ time in preparation. On such situation, the Teachers’ Service commission also finds it difficult to replace a new within that particular period more so if it is in the middle of the term. The learners at such stay long without learning and this interferes with the syllabus coverage. Success of a school depends on the syllabus as it gives both teachers and students ample time to revise. Another excerpt from the Education officials:

According to our records, we have seen a drop in some schools’ academic performance in particular cases where good and experienced teachers have left the profession. For example in one of the best schools in this county, students used to do well in English as a subject, one of the longest serving teachers considered the best and a national examiner left the profession to teach in a local university. Following the performance in the subject for sometimes, we realized that the school had significantly dropped’ Interview Conducted on 17th September, 2017).

Based on the sentiment, the implication is that teachers have varied teaching approaches and therefore once a new teacher joins a school, students would take more time to adjust in order to understand the new teachers’ approaches. This hinders the smooth students’ academic progression. On a general basis, all the education officials interviewed observed that the continual loss of teachers from schools in the county had a negative effect on the momentum of tutoring in schools. This was a manifestation that when teachers quit schools particularly if they are those experienced and effective and could have been mentoring the students, the students are discouraged. The findings implicate that attrition has serious effect on the students’ academic achievement particularly on learners who receive remedial assistant from certain teachers who leave, are automatically affected. This also gives an impression that there are teachers in the profession who enjoy teaching as a profession and could wish their learners a bright future but because of various reasons have to quit. It is also an indication that students have preference on the pedagogy of teachers who teach them.

Some more excerpt from the observations by the principals who on extend at which attrition effects students’ academic achievement. For instance, one of the principals had this to say;

In a normal instance when there is a high number of teachers’ leaving the school, the students’ academic performance drops significantly. In most occasions whether the movement is for better or for whatever reason learners may not understand and

therefore are de-motivated and definitely their performance declines.(Interview Conducted on 21st September, 2017)

Majority of the principals' reported that attrition had more effect on students in sub-county schools due to their entry behaviour. According to them, these students cannot study on their own without a teacher's support. This is an excerpt from one of the principals;

...constant teacher turnover creates instability, distractive and disruption of school activities. This is because some of the teachers who leave are very close to the students and therefore their departure creates restlessness in students making the situation difficult to maintain. Furthermore, the entry behaviour of most students to sub-county schools is low as compared to those to County and Extra county schools and therefore the presence of teachers in class is paramount (Interview Conducted on 24th September, 2017).

The study findings seem to accept the contribution by Daft (2010) established that a teacher is a key figure in the students' academic achievement and could turn average students in schools to success. The principals' results present a more nuance picture on why teacher attrition is a problem to students' academic performance in public secondary schools in the County. However, there were those principals' who indicated that teacher attrition had no effect on the learners' academic progression with various observations.

An example of an excerpt from one such principal state;

Considering that our school has enough teachers, attrition has no big impact because there are always plans in place to ensure academic continuity when a particular teacher leaves. In most occasions, we donate teachers to deserving schools when asked. (Interview Conducted on 24th September, 2017)

The sentiment shows that some schools are overstaffed in the study area while others whether they had shortages, had put in place mechanisms to fill the gap. The findings also show staff imbalance and lack of equal distribution of teachers in schools. Majority of the interviewed principals had similar sentiments but principals whose schools had consistently produced good results in the national examinations observed that there was much more needed to be addressed in order to improve teacher retention; Besides, there should be emphasis on the strategies that each school has put in place. An excerpt from one such principal stated;

To me attrition has no effect on my school operations considering that we put in place teacher training programs to build competency and improve quality of delivery. Teachers posted here feel motivated to work since they are satisfied with the conditions created in the institution. You know competence increases interaction between teacher and learner which is determinant to success'' (Interview Conducted on 24th September, 2017)

The principals' views indicate that the schools that try to address attrition have put certain strategies that motivated teachers to work in an environment where their ability and skills were valued and recognized. These sentiments came from most of the sampled principals, which is an indication that schools in Uasin-Gishu County had factored in programs that attract teacher retention. On the issue of distractive and disruptive activities, teachers were of the observation that in the absence of enough teachers in schools, student leaders run most of the affairs in the system. In the process, some student leaders usurp the responsibilities of principals in exercising power, and even possess immense power than the administrators of schools. The teachers attributed the rising cases of indiscipline in schools to certain student leaders who plan and execute bad behaviour knowing that they have the

support of majority of students who are able to inflict havoc and cause serious damage. An excerpt on the observations made,

The new policy on student leadership in schools appears to be unclear; students are more powerful than the principal even teachers. The criteria used for selection of electoral seats has a political dimension where candidates use money to bribe students who are the electorates sees the very undisciplined candidates emerging the winners. In most occasions, they settle for most corrupt and very influential personalities (Interview Conducted on 20th September, 2017.

In line with the findings, there is a clear indication that the government did not carry out enough consultation before the implementation of the prefects’ system in selecting leaders. It could also imply that most of the teacher attrition in schools is influenced by students’ behaviour.

Correlation of Teacher Attrition and Students’ Academic Performance

The researcher sought to determine the relationship between the level of teacher attrition and students academic performance. The researcher used document guide to collect data from the county director’s statistics department and the sampled school principals, for a period of five years 2012-2016. The study used the results obtained from KCSE school mean score as tool to measure students’ academic performance. The results are presented in Figure 2.

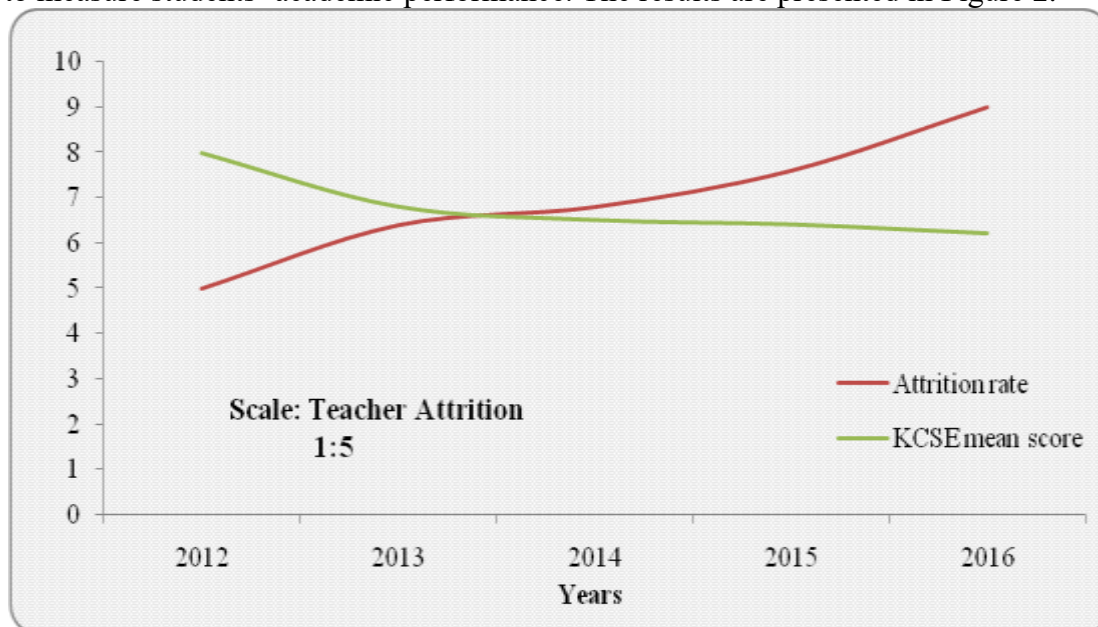


Figure 2: Graphic Analysis of Teacher Attrition Rate and KCSE Performance

The results show that the analysis trend of performance in the thirty (30) sampled schools on the downward trend while teacher attrition trend is on the uphill. The academic performance in schools in the year 2012 was very high but reduced by a significant margin mean score in the year 2016. The attrition rates increased over the study period 2012 to 2016 as indicated by a rising smooth curve from twenty five (25) teachers in 2012 to forty five (45) in 2016. The academic performance on the other hand, shows a falling trend in the mean score of the selected schools from eight (8) to a mean score of six point two (6.2). This score is important to the study in that it indicates the effect of teacher attrition National examination results of the sampled schools. This shows that the relationship between teacher attrition and students’ academic performance is converse related. The graph shows that as the attrition rates

increases, the students' academic performance decreases. This is an implication that attrition has a direct effect on students' academic performance. These results agree with the Teachers' Service Commission report (2010) which indicates that the 10,000 teachers lost annually hindered service delivery, syllabi completion, and disrupted teaching and negatively affected the students' academic performance in most public schools in Kenya. The report further established that most schools with less qualified teachers tend to lack basic skills in certain subjects and are likely to lag behind academically. According to Beatty (2013), schools that have high teacher attrition rates tend to achieve poor results and in the process employ less experienced teachers in order to fill the gap and cater for large class sizes which have a negative impact on learners.

Conclusion

On the effect of attrition on students' academic performance, Majority of the respondents who participated in the study indicated that the syllabus completion was affected and students lose hope in their future career. The findings further revealed that in the absence of teachers there is instability, destruction and disruption of school properties and activities are observed. Another considerable number indicated that learners took time to adjust and adapt to the techniques and methods employed by the new teacher, turnover increased the teachers' workload which in turn affected curriculum implementation and assessment of students' progress. However, the study also found out a minimal number of teachers did not agree on this issue that students' academic performance in the national examinations were affected except for students who used to receive remedial assistance from the teachers who had left. On the teacher front, some principals indicated that majority of the teachers who had left were highly qualified and experienced and their replacement could not match the aptitude and charisma that they had left. On students' discipline and behaviour, the study revealed that it depended on individual teacher relationship with the learners. However, majority of the principals were of the observation that the prefects system of election was to blame for school strikes and students' indiscipline. Furthermore, migration of students to other schools was not an effect of teacher attrition while the effect on a negative image of the school management was a factor that contributed to inefficient and ineffective flow of school activities. Correlation statistics also showed that there existed a significant negative at ($r=-0.296$ and $p<0.01$) correlation between attrition and academic performance of students in schools. This is a strong indication that an increment in attrition resulted to reduction in academic performance of schools. In general, teacher attrition significantly affected academic performance of students in public schools in various aspects as discussed in chapter four of this study. The school principals should therefore make fair decisions and promote open discussions when dealing with teacher issues in order to use the feedback from teachers to improve any strained relationship. The study therefore recommended that the Ministry of Education and the Teachers' Service commission should employ more teachers.

References

- Buchanan, J. (2012). Telling Tales Out of School: Exploring why Former Teachers are not returning to the Classroom. *Australian Journal of Education*, 56 (2), 205-217. Retrieved from <http://www.questia.com/library/1G1-299759890/telling-tales-out-of-school-exploring-why-former>.
- Chumba, S. (2014). *Principals Mobility in Kenya: Causes and its Effects on Teachers' Efficacy*. International Journal of Education and Research; Delhi, India.
- Craig, C. J. (2014). From stories of staying to stories of leaving: A U.S. beginning teacher's experience. *Journal of Curriculum Studies*, 46(1), 81-115. doi:10.1080/00220272.2013.797504.

- Daft, L. R. (2010). *New era of management*. (9th ed.). Sydney: South-Western Cengage Learning.
- Darling-Hammond, L. (2016). Research on Teaching and Teacher Education and Its Influences on Policy and Practice. *Educational Researcher*, 45(2), 83 – 91
- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61(1-2), 35-47.
- Goldring, R., Taie, S., & Riddles, M. (2014). *Teacher Attrition and Mobility: Results from the 2012–13 Teacher Follow-up Survey* (NCES 2014-077). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved [date] from <http://nces.ed.gov/pubsearch>.
- Grissmer, D. (2006). *Teacher turnover and teacher quality in South Africa*. Cape Town: Quick Fix Publishers.
- Ingersoll, R. (2012). Beginning Teacher Induction: What the Data Tell Us. *Phi Delta Kappan*, 93(8), 47-51. <http://www.kappanmagazine.org/content/93/8/47>.
- Ingersoll, R., & May, H. (2012). The magnitude, destinations and determinants of mathematics and science teacher turnover. *Educational Evaluation and Policy Analysis*, 34(4), 435-464.
- Ingersoll, R., & Perda, D. (2010). *How high is teacher turnover and is it a problem?* Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? *CPRE Research Reports*, July 2014.
- Kizito, A., Chumba, S. & Kindiki, J. (2010). The Trends and Effects of Teacher Attrition on Secondary School Education in Kenya: A case of Kisumu City. *International Journal of Research in Education*, 2(2), 58-67.
- Koech, S.J.. (2011). *Factors that influence teacher turnover in Baringo District secondary schools*. Masters Thesis, Kenyatta University.
- Mayer, M. J., & Furlong, M. J. (2010). How safe are our schools? *Educational Researcher*, 39, 16-26.
- Mulkeen, A. & Crowe-Taft, N. (2010). *Teacher Attrition in Sub Saharan Africa: The Neglected Dimension of the Teacher Supply Challenge*. Retrieved on December 31, 2016 from <http://unesdoc.unesco.org/images/0018/001881/188197e.pdf>.
- Mulkeen, A. (2010). *Teachers in Anglophone Africa: Issues in Teacher Supply, Training, and Management*. Washington, DC, World Bank.
- National commission on teaching and America's future, (2013). *No dream denied: A pledge to America's children*. New York: NCTAF. Retrieved from <http://www.utofp.org/Forms and Documents /NoDrean Denied.pdf>.
- NCTAF, National Commission on Teaching and America's Future, (2007). The High Cost of Teacher Turnover. *Policy Brief*, Washington, DC.
- Ndoye, A., Imig, S. R., & Parker, M. A. (2010). Empowerment, leadership, and teachers' intentions to stay in or leave the profession or their schools in North Carolina charter schools. *Journal of School Choice*, 4(2), 174-190.
- Pitsoe, V. J. (2013). *Teacher Attrition in South Africa: Trends, Challenges and Prospects*. Journal of Social science vol.36 (3): University of South Africa.
- Reche, G.N., Bundi T.K., Riungu J.N., Nthia J, Mbugua Z.K. (2012). Factors contributing to poor performance in Kenya Certificate of Primary Education in public day primary schools in Mwimbi Division, Mara District Kenya. *Int. J. Humanities and Social Science*, 2(5), 127-133.

- Salifu, I. (2014). Barriers to Teacher Motivation for Professional Practice in the Ghana Education Service. *Policy Futures in Education*, 12(5), 718 – 729.
- Ruto, K.J., Kapkiai M., Kiprop, D. (2016). Effect of Head Teachers' Turnover on Teacher Performance in Public Primary Schools in Turbo Division, Kenya. *International Journal of Education and Research*, 4(10), 163 – 174.
- Teachers Service Commission, (2007). *Operation Manual on Teacher Management: Teachers Service Commission*. Nairobi. Jomo Kenyatta foundation Teachers Service Commission, (2003). Revised Guidelines for recruitment of Primary School Teachers, Rep. No. CS/TSC/34B/Vol.111/50.
- UNESCO Institute for Statistics (2016). *The world needs almost 69 million new teachers to reach the 2030 education goals*. Available at <http://uis.unesco.org/sites/default/files/documents/fs39-the-world-needs-almost-69-million-new-teachers-to-reach-the-2030-education-goals-2016-en.pdf>. Accessed 27 March 2017.
- UNESCO Institute for Statistics [UIS] (2011). *Information Sheet No. 3. Projecting the global demand for teachers: meeting the goal of universal primary education by 2015*. UNESCO Institute for Statistics. UNESCO.
- Utah Education Association, (2001). *Parental Involvement Strongly Impacts on students' achievement*. Retrieved from www.google.com. 22/11/11.
- World Bank, (2012). *Gender Equity and Development*. World Development Reports.
- World Bank (2010). *Teacher policy and management in fragile and conflict-affected situations: A review of issues, policies and experiences*. Washington, D.C., USA.
- World Bank, (2012). *Gender Equity and Development*. World Development Reports.
- Xaba, M. (2003). Managing teacher turnover. *South African Journal of Education*, 23(4), 287-291.