



The Influence of Teacher Work Load on Learners' Academic Performance in Public Secondary Schools in Keiyo-Sub County, Kenya

Jelagat Kimeli¹, Lydia Kipkoech² and Maureen Kirwa¹

¹Mount Kenya University, P.o Box Thika, Kenya.

²University of Eldoret p.o Box 1125 Eldoret, Kenya.

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ABSTRACT

The aim of this study was to investigate the influence of teachers' workload on learners' academic performance in secondary schools in Keiyo South Sub-County. The study adopted cross-sectional research design by use of concurrent mixed methodology. The target population for the study was 31 principals and 347 teachers. Stratified simple random sampling and purposive sampling method was used to select the respondents' teachers and principals respectively. This implies that 31 head teachers and 182 teachers participated in this study. The validity of research instruments was ascertained by in-depth discussion with the expert judgement before proceeding to the field. Reliability of the instruments was also ascertained through test-retest method at an interval of two weeks to respondents who did not participate in the actual study. Data was collected using questionnaires, interview schedules and document analysis. The quantitative and qualitative data collected was collected and analysed using descriptive and inferential statistics; Descriptive statistics involved the use of frequencies and percentages while inferential statistics involved the use of Pearson Correlation Analysis and the qualitative data was analysed thematically and presented in narrative form. The found out that reducing teachers' workload could enhance students' academic performance. Similarly, there was a statistically significant and negative relationship between teachers' workload and students' academic performance in secondary schools. The study recommended that there is need for TSC to increase the number of teachers in secondary schools to reduce teachers' workload since high teachers' workload translates to ineffective teaching leading to poor students' academic performance.

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1.0 Introduction

According to report by UNESCO institute for statistics (2006), Sub-Saharan Africa will need another 1.6 million teachers by 2015 to provide every child with quality education. The report also indicated that chronic teacher shortages are also expected in the Arab states, which will need to expand their teaching force by 26 % in less than a decade to achieve the same goal (UNESCO, 2006). Another report by UNESCO indicated that countries in the World need to recruit more than 28 million teachers in the next decade. The greatest challenge lies in Sub-Saharan Africa, which needs to expand its teaching force by 68 % over this period. Mozambique is an example of one of the worst hit countries by teacher shortages with the PTR of 67.4:1. The report further estimated that in Sub-Saharan Africa, the number of primary school teachers must grow from about 2.5 million teachers to 3.7 million to fulfil the EFA commitment, indicating a gap of 1.2 million teachers, more than half of whom are needed in West Africa alone. It also estimated that for every two teachers available in 2006, there must be three others by 2015 (UNESCO, 2006).

According to Asikhai (2010), education at secondary school level is supposed to be the bedrock and the foundation towards higher knowledge in tertiary institutions. It is an investment as well as an instrument that can be used to achieve a more rapid economic, social, political,

technological, scientific and cultural development in a country. It is rather unfortunate that the secondary schools today are not measuring up to standard expected of them. There has been public outcry over the persistently poor performance of secondary school students in public examinations. According to Nwokocha and Amadike (2005), academic performance of students is the yardstick for testing educational quality of a nation. Hence, it is expedient to maintain a high performance in internal and mostly external examinations.

Students' academic performance is affected by numerous factor including gender, age, teaching faculty, students schooling and school staffing amongst others. Many researchers conducted detailed studies about the factors contributing student performance at different study levels. Graetz (1995) suggested "A student educational success contingent heavily on social status of student's parents/guardians in the society. Considine and Zappala (2002) noticed the same that parent's income or social status positively affects the student test score in examination. According to Minnesota (2007) "the higher education performance is depending upon the academic performance of graduate students. Durden and Ellis quoted Bratti and Staffolani (2002) observed that "the measurement of students' previous educational outcomes are the most important indicators of students' future achievement, this

refers that as the higher previous appearance, better the student's academic performance in future endeavours.

The main challenge facing Kenya since independence is expanding education all round while at the same time improving and maintaining its quality. The staffing norms in secondary schools have resulted to high student/teacher ratio that causes a strain on the few teachers in employment hence lowers the standard of education. A report by UNICEF (2011) showed that for nearly a decade, in spite of the sharp increase in student's enrolment, the Teachers Service Commission has maintained a teaching force of 235,000 teachers. It's clear that teachers' recruitment and utilization may influence the quality of teaching in secondary schools. The Ministry of Education science and technology, on Teachers Service Commission staffing norms, revealed that on average a secondary school teacher needs to teach 22 lessons a week amounting to 14.6 contact hours. This is less than 18 hours of teaching that secondary schools were expected to maintain (Republic of Kenya, 2005). Keiyo south sub-county is partly a semi-arid area where teachers are given hardship allowance and this has a larger number of teachers to be retained in the area. Despite this, the academic performance of secondary schools in the sub-county in relations to other sub-Counties is wanting therefore this study investigated the influence of teachers workload on students' academic performance in secondary schools in Keiyo South Sub-County.

2.0 Literature Review

In Kenya, secondary school teachers specialize in two teaching subjects as required by the TSC. Subjects are allocated different number of lessons per week. Thus, different combinations have different number of lessons in different classes (Kimani, Kara & Njagi, 2013). This means that teacher's number of lessons depends on their subject specialization, the number of streams in the school and the number of teachers teaching the same subject. The higher the number of streams, the number of lessons per week increases while when the number of teachers teaching the same subject increases, the less the number of lessons per teacher per week. The larger the class size the heavy the workload specifically when dealing with the marking subjects like Math's, English and marking of exams and also when dealing with individual differences (Betts, Zau, & Rice, 2003).

An appropriate balance in teaching load is vital for successful teaching and learning in a school. Teaching and learning are likely to be influenced by the workload teachers have in school. The overload for teachers may imply inadequate preparation for teaching, poor coverage of the syllabi and inadequate assessment of students (Asikhia, 2010). Consequently, the quality of teaching suffers and is likely to affect the learner achievement as well. This study investigated whether the number of lessons taught by teachers per week influences students' academic performance in Kenya Certificate of Secondary Education.

The teacher must avoid the common error of assuming that s/he is teaching homogeneous group. In spite of the efforts at sorting children into learning groups or classes at the same time learning level, in actual fact they cover the whole range of ability and interest (Mbugua, Kibet, Muthaa, & Reche, 2012). As a result, these are differences in their rate of understanding and in their performance. The teacher to be most effective, must act like a miracle worker, sorting out the children in his/her mind into groups according to their level of understanding of a particular subject and setting each group the path most suited to its rate of understanding. Examinations

are set in all parts of the world. To be specific in France, exams are more ritualistic than in Nigeria (Olaleye 2011). The point is that examinations are distorted mirror which reflects certain imperfection in teacher's skills. Both the mirror and the teacher need re-examination but not the poor unfortunate child who is caught between the two poles. Even monkeys learn many skills and tricks. Far more children could pass their exams without tears if teachers could improve their teaching techniques and teach principles rather than facts (Adeyemi 2010).

A report by UNICEF (2011) showed that for nearly a decade, in spite of the sharp increase in student enrollment, the TSC has maintained a teaching force of 235,000 teachers for both primary and secondary schools, replacing only those that retired, resigns or died. The current TPR is 1:45. The country now faces a dearth of teachers, textbooks and facilities for applied education subjects that include computer studies. Further, it must be noted that distribution of teachers across the different counties remains uneven with most women teachers concentrate in counties with big cities like Nairobi, Nakuru, Mombasa and Kisumu.

Michaelowa (2002) in Nepal found out that working conditions in the mountainous areas were so challenging that teachers only stayed a short period before leaving. In Zambia one out of three rural teachers and one out of our urban teachers move to new jobs during the year. In the recent DFID research covering twelve case study countries, attrition rates were found in sub-Saharan Africa.

Odhiambo (2005) contends that there is a growing demand from the Kenyan government and the public for teacher accountability. Schools are commonly evaluated using students' achievement data (Heck, 2009). It has been proved that teachers have an important influence on students' academic achievement. They play a crucial role in educational attainment because the teacher is ultimately responsible for translating policy into action and principles based on practice during interaction with the students (Alderman, 2008). A study by Kimani, Kara and Njagi (2015) in Kenya showed that significant differences were observed in schools' mean score depending on teachers' weekly teaching workload. Schools where teachers had a weekly teaching workload of 25 lessons or less registered significantly higher mean scores than schools where teachers had 26 lessons or more.

According to education watch (December 2013/January 2014) the North Eastern region they did not supervise the 2011 KCSE exams due to lack of staffing and security leading to massive cheating by students. Furthermore, being a teacher in Kenya is a sacrifice, you are underpaid and overworked. No one listens to teachers, why can't the government employ more teachers? It is so sad that teachers are often on the streets agitating for their rights. For Kenyan teachers, they have to bear with inadequate teaching facilities and crowded classrooms and at the end of they earn what most feel is much lower of what they deserve. Besides downing tools for their pay hike, public schools teachers have also been calling the government to employ more teachers to address the teachers shortage that currently stands at 80,000. In many public schools, a teacher is tasked to teach over a hundred pupils in one classroom thus failing to give personal attention to each pupil.

The number of lessons attended by a teacher a week depends on: the teaching subjects, number of streams in a school and the number of teachers teaching one or two similar subjects.

Generally, the study seeks to find out the number of lessons taught by teachers in different schools so as to reflect the workload of teachers. This will enhance the stakeholders especially the TSC to deploy teachers to schools which are dismally understaffed. Therefore, this study investigated the effect of teacher workload on students' academic performance in secondary schools in Keiyo South Sub-County.

3.0 Methodology

This study adopted the use of mixed methodology. According to McMillan and Schumacher (2006) the development and use of mixed method research designs have increased, because it is useful in determining what the existing situation is in terms of a particular research question through non-experimental quantitative studies, while on a deeper level determining why this existing situation exists. In this study, questionnaires and interviews were used making this study a mixed methods research design. The questionnaires provided the quantitative aspects while interview schedule gave the qualitative data. In addition, the study employed cross-sectional survey research design. The descriptive survey design has widely been used for research studies in education. The study targeted all the 34 public secondary schools in Keiyo south Sub-County, 34 principals and 347 teachers in the secondary schools in Keiyo South Sub-County. As noted by Cohen, Manion, and Morris, (2007), factors such as expenses, time and accessibility frequently prevent researchers from gaining information from the whole population. Therefore, there is need to obtain data from a smaller group or subset of the total population in such a way that the knowledge gained is representative of the total population under study. The sample size for this study was based on a sample size determination formula by Krejcie and Morgan (1970) as cited by Kasomo (2001). The formula gave a sample size of 31 principals and 182 teachers

In selecting schools to participate in the study, stratified sampling technique was used to place secondary schools into division. Stratified sampling technique ensured that each stratum was assigned the proportionate number of secondary schools as in the population. Simple random sampling was used to obtain the sampled teachers in each stratum.

The study employed the use of questionnaires, interviews and document analysis to collect data relevant to this study. According to Kombo and Tromp (2006), social science commonly uses questionnaires, interview schedules, observational forms and standardized test as research instruments.

Validity was ensured through expert judgement while reliability was tested by conducting a pilot study. The questionnaires were administered twice at an interval of two weeks to respondents who did not participate in the actual study. Their responses were compared using Spearman Rank Order Correlation formula. A correlation coefficient of more than 0.7 was accepted to test reliability (Orodho, 2009). In this study, a correlation coefficient of 0.78 was obtained and therefore the instruments were considered reliable and adopted for the study.

Data was analysed using descriptive and inferential statistical techniques. The purpose of descriptive statistics is to enable the researcher to meaningful describe a distribution of scores or measurements using a few indices or statistics (Mugenda & Mugenda, 1999). The average figure was used to show particular frequency of respondents in the performance and the average lessons, assignment and workload of every teacher and student of secondary schools in Keiyo south Sub-County.

The specific descriptive statistics to be used include frequencies, percentages and means. The results were presented by use of frequency tables and Figures.

Qualitative data from interviews was analysed thematically and was reported in narrations and quotations. Data from document analysis was analyzed quantitatively by computing the students' mean score. This was presented in form of tables and figures. To test the effects of staffing on academic performance Pearson Correlation analysis was used.

4.0 Findings and Discussions

The aim of this study sought to determine the influence of number of lessons that teachers teach per week on academic performance of learners in secondary schools in Keiyo South Sub-County. To achieve this objective, teachers were asked to rate their level of agreement on a five likert scale items in the questionnaire on the influence of number of lessons taught by teachers on weekly basis on academic performance of the learners. Their responses were tabulated and the results are presented in Table 1.

Table 1 showed that 72(43.1%) teachers agreed with the statement that reducing teachers' workload to 10 lessons per week leads to better academic performance amongst the students, 43(25.7%) teachers strongly agreed with the statement, 27(16.2%) teachers strongly disagreed with the statement and 14(8.4%) teachers were undecided while 11(6.6%) teachers disagreed with the statement. The study findings showed that majority (68.8%) of the teachers in secondary schools in Keiyo South Sub-County believed that reducing teachers' workload could enhance students' academic performance. This finding agrees with the findings of the study done by Kimani et al. (2013) who contended that factors that contribute significantly to students' academic performance in secondary schools include teachers' teaching workload, administration, marking and revision of students' assignments and provision of individualized attention to weak students.

In addition, 93(55.7%) teachers agreed with the statement that high work load of more than 30 lessons per week to teachers affects negatively students' academic performance, 46(27.5%) teachers strongly agreed with the statement, and 19(11.4%) teachers were in disagreement with the statement while 9(5.4%) teachers were undecided. It emerged from the responses that majority (83.2%) of teachers were of the view that high workload affects negatively students' academic performance leading to low performance amongst. This concurred with Naylor and Malcomson (2001), who reported teachers' workload increased because they spent fifty-three

Table 1. Responses on Influence of Teachers' workload on Students' Academic Performance.

Statement	SD		D		UD		A		SA	
	F	%	F	%	F	%	F	%	F	%
Reducing teachers' workload to 10 lessons per week leads to better academic performance amongst the students	27	16.2	11	6.6	14	8.4	72	43.1	43	25.7
High work load of more than 30 lesson per week to teachers affects negatively students' academic performance	5	3.0	14	8.4	9	5.4	93	55.7	46	27.5
Teachers' workload has no effect on students' academic performance	67	40.1	54	32.3	7	4.2	23	13.8	16	9.6
Number of assignments and timely marking affects students' academic achievement	12	7.2	19	11.4	17	10.2	55	32.9	64	38.3

hours a week preparing their lesson notes for teaching and marking scripts. This led to difficulty for teachers to accomplish all their objectives because of the lack of time and consequently, the performance of the teachers and the students was impaired. In addition, Nwwikina and Nwanekezi (2010) noted that high teacher workload in Nigerian secondary schools affected students' academic performance.

However, 67(40.1%) teachers strongly disagreed with the statement that teachers' workload has no effect on students' academic performance, 54(32.3%) teachers disagreed with the statement and 39(23.4%) teachers were in agreement while 7(4.2%) teachers were undecided on the statement. It emerged from the study findings that majority (72.4%) of the teachers indicated that workload has an effect on students' academic performance. According to Osagie, and Okafor, (2012), due to the population explosion and the inability of the local government to employ more teachers in Nigeria, it has led to too much workload for the teachers and this has certainly affected the academic performance of the students.

Further, 64(38.3%) teachers strongly agreed with the statement that number of assignments and timely marking affects students' academic achievement, 55(32.9%) teachers agreed with the statement, 19(11.4%) teachers disagreed with the statement and 17(10.2%) teachers were undecided while 12(7.2%) teachers strongly disagreed with the statement. From the responses, it can be argued that majority (71.2%) of the teachers were of the view that the number of assignments and timely marking affects students' academic achievement. This implies that for small classes teachers are able to give and mark as many assignments as possible in comparison to the number of assignments given to large classes.

On interviewing the head teachers, it emerged that teachers with high workload were overwhelmed by the number of assignments given to students and this was frustrating to teachers. This has more so made teachers to be unsatisfied with the jobs. Liu and Ramsey (2008) found that stress from poor work conditions had the strongest influence on teachers' job satisfaction and noted that inadequate time for planning and preparation and a heavy teaching workload reduced satisfaction from teaching.

Further, Pearson correlation analysis was used to determine the relationship that existed between teachers' workload and students' academic performance. The results are presented in Table 2.

Table 2. Correlation coefficient Between Teachers' Workload and Students' academic Performance.

Variables	Pearson Correlation Coefficient
Teachers' Workload	$r = -0.728^{**}$
Students' academic performance	

The results of Pearson Correlation Coefficient used for data analysis suggested that there is a significant negative relationship between teachers' workload and students' academic performance in secondary schools at $p \leq 0.01$ significance level ($r = 0.728$).

5.0 Conclusion and Recommendations

The study concluded that there was a statistically significant and negative relationship between teachers' workload and students' academic performance in secondary schools. Showing that high teachers' workload translates to ineffective teaching leading to poor students' academic performance. It was therefore recommended that there is need for TSC to increase in the number of teachers in secondary schools to reduce teachers' workload since high teachers'

workload translates to ineffective teaching leading to poor students' academic performance.

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