

INFLUENCE OF TEACHER WORK LOAD ON STUDENTS' ACADEMIC PERFORMANCE IN LAIKIPIA WEST SUB-COUNTY, KENYA

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Abstract: *This study examined the influence of teachers' workload on students' performance in national examination in public day mixed secondary schools in Laikipia West Sub-County. The study employed survey research design to collect large information about the work load and its effect in relation to academic performance. Laikipia west sub-county had a total twenty three public secondary schools (23). The study relied on both primary and secondary data collected and analyzed. Primary data was collected through questionnaires administered to teachers and other sampled respondents. In this study, the researcher sampled out seven (7) public schools which represented 30.4% of the total schools. The total number of participants in this study therefore consisted of seven (7) principals (heads of institutions), fourteen (14) class teachers, one (1) quality assurance and standards officer (Q.U.A.S.O) and fourteen (14) form four student leavers were preferred because they had completed their studies and therefore had performance experience to suggest teachers' behavior through observation. Questionnaire is the major data collection tool. Descriptive statistics were used to analyze both the quantitative data obtained, the researcher cleaned, coded all the data and entered in the computer for analysis using the SPSS version 28 which is able to handle large amount of data, given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient and quick in analyzing data. After analysis, the results were presented using frequencies, percentages and tables and plates. The study findings revealed that In Laikipia West Sub-County there has recorded very poor students' performance in KCSE. The problem was majorly attributed to heavy teachers' work load. The study reveals the heavy teachers' work load in various public day secondary schools in Laikipia West Sub- County and the immediate course of action to be taken to ensure teachers' are relieved from heavy work load. The study therefore concluded that teacher workload can have a significant impact on students' academic performance. It is therefore important for schools and administrators to recognize the importance of providing teachers with manageable workloads to ensure that they can provide high quality instructions and support needed to their students.*

Keywords: *Teacher Workload, academic performance, students' academic performance, Kenya national examination performance*

INTRODUCTION

Workload is a critical factor to consider when maintains the performance of not only organizations but also schools as well. When the workload is too high, it can lead to fatigue, stress and burnout which can negatively impact performance. Overworked individuals may have difficulties in concentration, and bring about the concept of being overwhelmed. This can lead to errors, lower

quality work and slower completion times(Hancock & Matthews, 2019). In school sector, the relationship between teacher workload and students' academic performance is complex and can be influenced by a number of factors(Bruggen, 2015). Teachers who are overworked and have large classes size may have less time to devote to each individual student which could therefore to lower academic performance(Gwambombo, 2013). Research has shown that class size and teacher workload can have significant impact on students' academic performance. An analysis from the national education policy center found that reducing class size can have a positive effect on students' achievement, specifically for students from low-income families and those academically struggling (Ujir, Salleh, Marzuki, Hashim, & Alias, 2020).

Heavy work load has also resulted in much work that create unnecessary burden for teachers within the stipulated period of working hours. This can undermine the attainment of educational objectives. Poor performance of students is usually blamed on the teachers by the management while teachers also complain of excessive work load. This perhaps has been caused by the ever-increasing student population, development of new secondary schools, and expansion of subject in the curriculum, which places more responsibilities on teachers and over-stretches them beyond their manpower carrying capacity thus resulting in over bearing work-loads leading to dismal academic performance in national secondary schools examinations as invested in this study (Kimani, Kara &Njagi, 2013).

Work load has significant impact on the performance of employees. The same case applies to teachers. The influence of teachers' workload on students' academic performance in national examinations is a growing field of concern by academicians and researchers. One measure of education quality is the pupil-teacher ratio which refers to the number of pupils per teacher in a school. This is directly related to the quality of time spent between a teacher and a learner (Siswanto, Supriyanto, Ni'mah, Asnawi&Wekke, 2019).

When teachers' workload is more than the maximum number of hours, they are deprived of their time to undertake and deliver quality teaching. If teachers are loaded with extra work, their overall efficiency decreases and teachers who are given appropriate loads are likely to attain a better level of teaching performance (Bernardo, 2017).

Simpson and Romulo (2010) conducted a study whose findings revealed that overloading teachers led to other unnecessary stress. In their study, they argued that the number of teaching lessons a teacher must teach per week, preparation of schemes of work, lesson plans, keeping records of work covered, visual teaching aids preparation, preparation of teaching notes and expected to come up with meaningful counseling of students as well as participating in co-curricular activities would burden teachers significantly.

Despite the considerable effort made by the ministry of education and Teachers service commission (TSC) to expand secondary school education and staffing, the challenge of teachers' work load and its impact on learners KCSE performance especially in Laikipia West Sub-County has not been fully investigated. This study therefore intended to examine the influence of teachers'

work load on students' academic performance in national examinations in public day mixed secondary schools in Laikipia West Sub- County, Kenya.

METHODOLOGY

Study Design

The study employed the descriptive survey design. Descriptive survey design involved the collection of quantitative and qualitative data by use of questionnaires followed by the description of characteristics of the sample population based on the collected data. These characteristics included people's attitudes, opinions, habit, relationships or any other education social issues (Mugenda&Mugenda, 2003). This design allowed the researcher to gather information, summarize, presents and interpret for the purpose of clarification about the work load and its effect in relation to academic performance in Laikipia West Sub-County.

Target Population

Laikipia west sub-county has a total twenty three public secondary schools (23). The study sampled seven (7) public schools which represent 30.4% of the total schools. The total number of participants in this study consisted of seven principals, fourteen class teachers, one quality assurance and standards (Q.U.A.S.O). Some form four student leavers were preferred because they had school performance experience to suggest teachers' behavior through observation. The study is strictly guided by the three specific objectives which are: to analyze the number of lessons taught by a teacher per week and its effects on students' performance in KCSE in public secondary schools, to identify how construction of internal test and marking load affects students' performance in KCSE in public secondary schools in Laikipia West Sub-county.

Sampling Technique

This study relied on two sampling techniques, namely: Simple Random Sampling and purposive sampling. Purposive sampling technique was used to sample quasi members since the members involved were class teachers of selected schools, sub-county Q.U.A.S.O. simple random selection technique used for the intention of the research was to find out whether teachers workload has any direct or indirect impact on students' performance and if there is any relationship , is it significant or not.

Purposive sampling can be used with a number of techniques in data gathering (Godambe2012). A study may be started with a survey, then purposive sampling done based on the survey (Brown 2005). Robbins et al. (2019) used a questionnaire as a systematic way to find informants in a study about acculturation. Under this technique, data gathering is crucial in research, as the data is meant to contribute to a better understanding of a theoretical framework (Bernard 2002). It then becomes imperative that selecting the manner of obtaining data and from whom the data was acquired be

done with sound judgment, especially since no amount of analysis can make up for improperly collected data (Bernard et al. 2016).

In this study, therefore, this sampling technique was used to select schools based on sex (gender), Sub-county QUASO and principals. Random sampling was used to select two teachers and twenty students per school respectively.

Sample Size

The study sampled seven (7) public schools which represent 30.4% of the total schools. The total number of participants in this research consisted of seven principals, fourteen teachers, one quality assurance and standards (Q.U.A.S.O) and 140 form four students, totaling to one hundred and sixty two (162). Form Four students were preferred because they have school performance experience to suggest teachers' behavior through observation. The total participants to be interviewed was one hundred and sixty two (162) out of thirty four thousands eight hundred and thirty four (34,834).

Data Collection Tools

The study employed questionnaire as the major data collection instrument. In this study, a questionnaire was designed in a five point Likert scale to measure the relationship between teachers' workload and students' academic performance in national examinations. The five point Likert scale was as follows: 5 for strongly agree (SA), 4 for agree (A), 3 for no comment (NC), 2 for disagree (D) and 1 for strongly disagree (SD). The questionnaire were divided into three main sections. The questionnaire was validated both in face and content by experts in the department of Education management. The test-retest method was used to determine the suitability of the research instrument.

The research questionnaire was administered to principal, teachers and QUASO by the researcher, while for students were administered by the assigned teachers. Descriptive statistics (frequent counts) were employed to present the response on research questions. Quantitative data was used. This is because meanings were derived from numbers and analysis was conducted through the use of counts. The guided questions to be prepared for the study were of three categories, i.e Principal, QUASO, Teachers and Students. These questions were set in line with the target objectives of the study and experience of the respondents concerning research problem. The position of each group of respondent in the social hierarchy was considered.

Data Collection Procedure

The research sought for a research permit from the university. This prompted the application for a research permit at National Commission of Science and Technology (NACOSTI). The researcher allocates resource to carry out data collection from the sampled public day mixed secondary schools in Laikipia West Sub-County, Kenya. The survey research design method was used to collect data. Questionnaires were administered to teachers and other sampled respondents to

collect primary data. Other related literatures from library provided secondary data. The researchers then proceed to ensure data is well safeguarded.

Data Analysis and Presentation

Regarding data analysis procedures, descriptive statistics were used to analyze both the quantitative and qualitative data obtained, the researcher cleaned, coded all the data and entered in the computer for analysis using the SPSS version 28 which is able to handle large amount of data, given its wide spectrum of statistical procedures purposefully designed for social sciences, it is also quite efficient and quick in analyzing data (Gastwirth *et al.*, 2009). After analysis, the results were presented using frequencies, percentages and tables.

RESULTS

Background Characteristics of Students

This section sought to establish the background information regarding the school enrollment, class enrollment by gender, number of streams and the number of teachers. The results is as follows:

With regards to school enrollment, no school had an enrollment of below 100 students. Schools with an enrollment of above 100 students to above 200 students comprised of 10% each as well as those who enrolled above 4000 students. Majority of schools had an enrollment of above 300 students. Schools with above 500 students comprised of 15%.

Regarding the class enrollment by gender, in form one, 45% of the respondents were boys while girls take the majority share comprising 55% enrollment. In form 2, there is an average enrollment 38% for boys while girls take the majority share of 62%. In form 3, boys' enrollment is at 42% while the girls' enrollment is 58%. However, there is a different finding in form 4 where the enrollment for boys is at 58% for boys while girls' enrollment is at 42%, averagely across all schools sampled.

Regarding the number of streams per schools, the a study established that 25% of schools had 1 stream while schools with 2 streams led with a majority at 45%. Schools with 3 streams comprised of 15% while schools with 4 streams comprised of 10%. Schools with more 5 streams per class comprised of 5%.

Regarding the number of registered learners per streams, schools with 20 learners per stream were at 5% while those with 30learners per stream comprised of 20% as those with 40 learners per stream stood at the highest at 40%. Schools with 50 learners per stream comprised of 30% while those with over 50 students per stream comprised of just 5%.

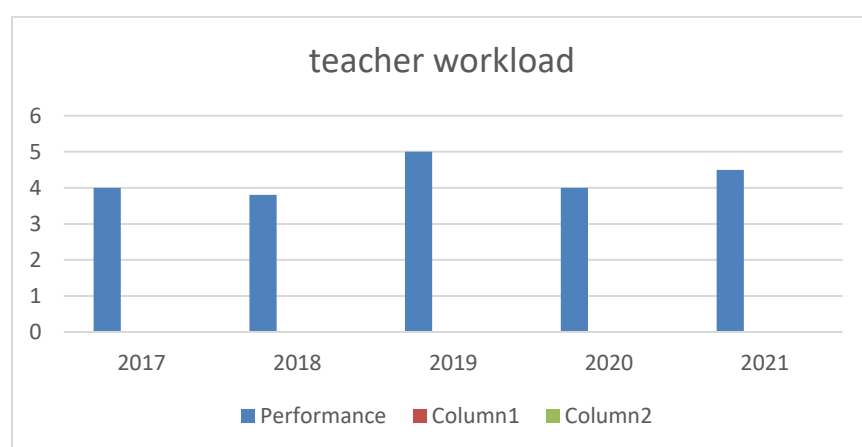
Background Characteristics of Teachers

The study sought to examine the number of TSC teachers employed by ender. Male teachers were averagely 12 while those employed on BOM terms were averagely 3 with a total average of 15.

On the other hand, TSC employed female teachers were at an average of 6 while those on BOM terms were at an average of 2 translating to a total of 8. Averagely, there were 18 teachers employed on TSC terms while those employed on BOM terms per school were averagely 5. This translates to an average of 27 teachers per school.

Teacher work load and student's academic performance

This sub-chapter sought to establish the influence of teacher workload on students' academic performance in the selected schools for the last 5 years.



From the graph above, a mean score of 4 was achieved in 2017, a mean of 3.8 in 2018, 5 in 2019, and a drop to 4 in 2020 while in 2021 there was an increase to a mean of 4.5.

Teachers workload

On teachers' workload, 65% strongly disagreed that teachers have less work to do at school. 25% as well disagreed. Only 5% were either undecided, strongly or very strongly agreed that teachers had less work to do in class.

Subject performance in the last 5 years

The study sought to examine the subject performance for the past five years. Plate 1 shows the distribution of the respondents by subject performance for the past five years

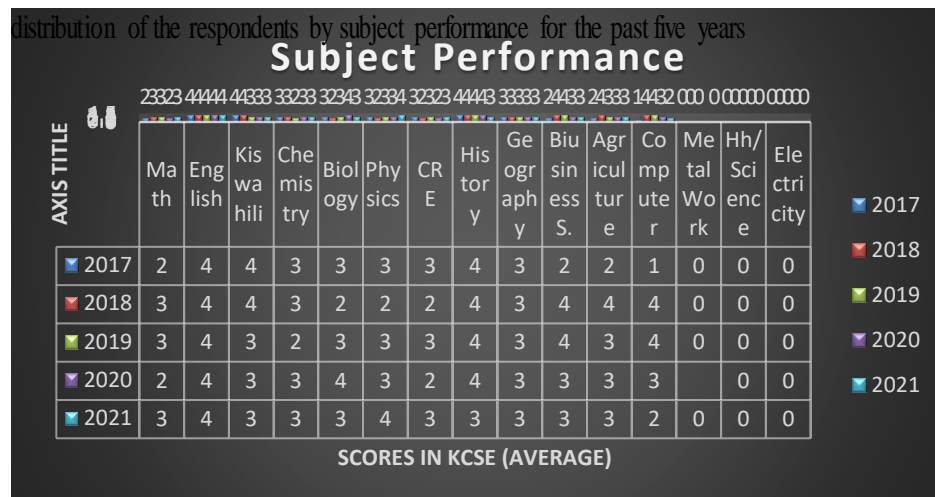


Plate 1 Distribution of the respondents by subject performance for the past five years

Regarding the average subject performance for the past five years, mathematics had a mean of 2.6, English 4, Kiswahili 3.5, Biology 3, Physics 3, Chemistry 2.8, History 3.8, Geography 3, Business a mean of 3.2, computer 2.8 while no results for other subjects since they were not being taught in the schools selected for this study.

DISCUSSION

While increased enrolments may suggest school systems have increased their capacity to accommodate more children, this did not necessarily translate into improved educational quality. The FPE was a noble idea, but the intended gains are being eroded by lack of effective teaching-learning process (Daily Nation, 2011: 19). In this case, quality learning processes includes teachers' work load which has a correlation with the students' academic performance.

Though developing countries have been able to improve the percentage of literacy to impress the international fraternity, the quality of education provided has been a major concern due to congested classrooms resulting from high enrolments. One of the major indicators of quality is the Pupil-Teacher ratio (PTR). The primary school PTR did not keep pace with rapid increase in enrolments. The greatest challenge facing developing countries in their efforts to attain the international goals of EFA and the MDGs have therefore been provision of quality education.

The findings of Yadar (2001) and the report by UNESCO (2008) have shown that classrooms, teaching aids and stationeries influence pupils' enrolment. Further they argue that learning is strengthened when there are enough reference materials such as textbooks and class rooms.

The PTR in most developing countries is in a worrying state. UNESCO (2006), estimated that over 84 per cent of classrooms had over 40 pupils per teacher. Majority of the countries that have PTR exceeding 40:1 are in Sub-Saharan Africa and Asia. Sub-Saharan Africa has the largest PTR with Congo having a PTR of 54:1, Mali 55:1, Mozambique 67:1, Rwanda 65:1, Ethiopia and Malawi

hovering around 70:1, South Asian countries such as Afghanistan with 83:1, Cambodia 50:1, and Bangladesh 50:1. (UNESCO, Institute of statistics, 2008).

The high PTR in many developing countries is as a result of large enrolments following the quest for universal primary education and the increasing teacher shortages. With such enrolments and reduced number of teachers, the available teachers face serious obstacles in an attempt to deal with over-crowded classes. These high enrolments have caused low efficiency in the schools which is one of the main reasons for the poor quality of education offered in many primary schools in the developing countries (UNESCO, 2006).

In order to fulfill the international mandate, more and more developing countries in Sub-Saharan Africa, South and East Asia and Latin America regions are utilizing the services of less qualified teachers. In Cambodia, these teachers are given fancy names like “Bare foot teachers”, contract and Para-teachers and provide “First Aid” services into the education system (King and Schielman, 2004). Countries such as Niger, Mali, Togo, India and China have been recruiting contract teachers in order to cope with teacher shortages and high PTR (UNESCO, 2006).

Maicibi (2003) asserts that when the right quantity and quality of human resources are brought together, they can manipulate other resources towards realizing institutional goals and objectives. Yadar (2007) and UNESCO (2008) postulate that object well handled practically impresses itself more firmly in the mind than the object merely seen from a distance. Pupil –teacher ratio refers to the number of learners enrolled in a given level of education divided by the number of teachers in the system (Williams, 1979). Mutai (2006) also states that learning is strengthened when there are enough reference materials such as textbooks and teaching aids which can positively change teachers and learners attitudes.

In Laikipia West Sub-County there has been an increasing cry on very poor students’ performance in KCSE. As noted already in the background, among other factors, the problem has been attributed to heavy teachers’ work load. The study reveals the heavy teachers’ work load in various public day secondary schools in Laikipia West Sub- County and the immediate course of action to be taken to ensure teachers’ are relieved from heavy work load.

On whether or not there was need to reduce teachers work load, 60% of respondents very strongly agreed that there was need to reduce teachers’ workload. Only 5% were undecided as none wither disagreed or strongly disagreed. Several commentaries over the past few years have questioned whether widespread teacher shortages exist (Aldeman, 2016; Antonucci, 2016). However, real-world indicators present compelling evidence of widespread shortages. Nearly every state is reporting shortages in certain subjects, and most are resorting to hiring teachers who are not fully certified for their teaching assignments. For example in USA, More than 40 states report shortages in several subject matter areas, such as mathematics, science, and special education, and more than 30 report shortages in a number of other fields, ranging from career technical education to bilingual education (U.S. Department of Education Office of Postsecondary Education, 2017). Another widely used indicator of shortages is the difficulty employers have in filling vacancies. Each year, the American Association for Employment in Education (AAEE) surveys a sample of higher

education institutions and districts across the country. In 2016-17, more than two-thirds of surveyed districts (69%) reported not having enough candidates for open positions as “a big challenge.” This was more than double the rate from the 2013-14 survey (AAEE, 2017).

CONCLUSIONS

On the relationship between teacher work load and students’ academic performance, this study established that there is a significant relationship between teachers’ work load and students’ academic performance. From the data obtained, it was noted that teachers had a huge workload. Workload in this study referred to the number of lessons per week per teacher. The study established that there was a shortage of teachers in the selected schools in almost every subject. This burdens the few existing teachers. The consequences of this are that teachers are left with limited time to attend to the many learners enrolled in schools hence low academic performance.

In conclusion, teacher workload can have a significant impact on students’ academic performance. It is therefore important for schools and administrators to recognize the importance of providing teachers with manageable workloads to ensure that they can provide high quality instructions and support needed to their students.

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