INFLUENCE OF CLASS SIZE ON TEACHERS TIME MANAGEMENT AND ITS IMPACT ON THE STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KWALE COUNTY-KENYA

Caleb Mboko Were - Masters Student, Kenya Methodist University

Abstract

Class size is a crucial factor in the classroom instruction since it determines the activities that are chosen. Activities in the classroom impact how a teacher engages with students and are critical in assessing learning quality. Class sizes in Kenya have grown over time as a result of increased population and the adoption of reforms in education aimed at making sure that all students receive a basic education. Education is a vital success factor in every economy, developed or emerging, because it is the process through which teaching and learning occur and knowledge is transmitted or passed down. Governments around the world support education to ensure that their populations are prepared with the skills and information needed to address existing and developing challenges. The statement made in the resolution of the Jomtien World Conference on Education for All in 1990, as well as the follow-up at the 2000 Dakar World Education Forum, emphasized the need of expanding access to education for all children. In Kenya, the implementation of the Free Primary Education (FPE) Policy in 2003 and the start of the Free Secondary Education Programme in 2008 more than doubled the number of students enrolled in both primary and secondary public schools. This issue has not only weakened teacher confidence, but it has also brought the topic of class size to the forefront of the country's educational and political agendas. Over the years, it had been seen that secondary public-school performance in Kwale County, Kenya, was declining. This objective of this study was to determine why performance was declining despite spirited efforts by stakeholders to support education. Further, the research sought to specifically establish the perception of students in secondary schools on their teachers' preparedness and delivery of teaching and learning. The population was students in Kwale County represented by candidates in form four, their teachers and Principals. Therefore, it was from all 98 public secondary with 6,540 form four students and 960 Teachers and 98 principals. Krejcie and morgan (1970) table of sample size determination was used to get 364 of 6,540 students, 274 of the 960 teachers, and 29 of the 98 principals. Structured questionnaires were used to collect data through drop and pick method in the selected schools. Random sampling of respondents among form four students and teachers was carried out while purposive sampling of principals was done. Responses were gathered on a five-point Likert scale and data analysis carried out through Statistical Package for Social Sciences (SPSS) version 22. Regression analysis was carried out to establish the relationship between the independent and dependent variable. The Cronbach alpha coefficient of .83, which indicates the research instrument's high level of internal consistency, was used to establish reliability. The findings established that large classroom, have a negative influence on two important and linked parts of a teacher's profession, namely instructional time and classroom management.

Key words – class size, academic performance, Time management

Background information

Education is a critical tool for a country's social and economic development. Basic educational abilities, such as reading and writing, can boost a person's income by up to 10%, serving as the ideal weapon for lifting individuals to freedom and assisting in the eradication of international poverty and famine. In order to achieve this, the Kenyan government decided to make education free and required for all citizens under the age of 18 (International Development Center of Japan (IDCJ) & Japan International Cooperation Agency (JICA), 2012). As a result, educational reforms were put into place to guarantee equal access to education for all citizens. The implementation of the FPE Policy in 2003 and the start of the Free Secondary Education Programme in 2008 more than doubled the number of students enrolled in both primary and secondary public schools. This issue has brought the topic of class size to the forefront of the country's educational and political agendas. As indicated by multiple reports in national publications, there has been an outcry from teachers and all residents for the government to reduce class size by hiring more teachers, and the lack of instructors has recently led to union agitation against the government. Clearly, due to economic and political circumstances, the problem of large classrooms in Kenyan schools is unlikely to go away anytime soon.

Academic Performance in Kenya's Secondary Schools

Amalu and Ndifon (2017) claim that academic achievement is the core of the educational system and determines whether an academic institution succeeds or fails. Amalu and Nanjwan (2019) further opine that factors such general intellect, a sense of adventure,

instructional methods, and accessibility of resources for teaching and learning all have an

effect on academic progress. Passing exams is the primary way to measure achievement in

Kenya's educational system, according to Maiyo, Akharunda, and Ndiku (2018). A

minimum C+ (Plus) grade in each subject, with a mean mark of C+ (plus), is seen as fruitful

evidence of a student's academic performance KCSE tests among public secondary schools.

Candidates are required to take exams in eight subjects in order to receive a grade from the

Kenya National Examinations Council. Table 2.

*Table 1: **KNEC and KCSE test grading scale***

Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Points	12	11	10	9	8	7	6	5	4	3	2	1

To display the scores, the average of all eight subjects is utilized. A candidate is considered

to have gotten a B+ grade in the Kenya Certificate of Secondary examination (KCSE) if

they receive a mean of 10 points across the eight subjects.

Concept of Teachers' Time Management

In order to work smarter, not harder, time management is the purposeful, planning and

control of time. One can rise productivity and attain a better work-life balance by striking

a balance between a variety of factors. Procrastination and missed deadlines and

appointments can result from poor time management at work. Anderson (2004) defines time

as an irreplaceable treasure. Teachers are constantly encouraged to invest their time where

it is most important to them. Working as a teacher necessitates great time management

abilities. Time management is very vital for secondary and postsecondary school teachers

who have to complete extensive and demanding workloads from schools, work, and other

various activities.

A school being a very important institution must be efficiently structured, and instructors who are critical to the attainment of educational goals must be efficient in order to execute their jobs successfully. The school system needs efficient teachers in order to achieve the stated goals of the school, higher students' academic performance inclusive. In Pakistan, student performance is closely linked to the influence of instructors' time management. Studies by Kayode and Ayodele (2015) in Pakistan on the relationship between time management by teachers and academic achievement, established a moderate relationship and recommended that teachers enhance their ability to manage their time. Khan et al., (2016) studied how time management affects teachers' performance. They discovered the effectiveness of teachers' time management strategies was found to be positively correlated with student achievement. The study also established that instructors who were good at managing their time were able to design classes in a way that greatly improved the performance of their students. Studies on teachers' time management in Nigeria by Kayode and Ayodele, (2015) concluded that time management relates positively with teachers' work performances and it is a role that is difficult to correct when it is poorly applied. In Kenya Kipkoech (2017) conducted a study in Elgeyo Marakwet County, Kenya, on the time management analysis strategies used by teachers in public secondary schools, and the findings revealed that most teachers do not adequately prepare and hence waste time, the majority of them teach without lesson plans or teaching materials. While some people struggle to communicate material to learners and that, there are a lot of teaching interruptions in public secondary schools. The academic achievement of children in the KCSE has decreased lately in Kwale County with a very low percentage of students transiting to Universities between 2016 and 2020 as follows 2016 (1.109%),2017 (4.884%),2018 (6.57%),2019 (10.346%) and 2020 (10.566%) (Ministry of Education, 2020). The performance has been ascribed in part to the instructors' performance. Ngando

(2011) found that many of instructors and learners fail to report to school on the first day of school, when schools start, most teachers begin writing their schemes of work, most educators show up to class without prepared lessons, and lengthy assemblies eat up class time in Kinango District, Coast Province, Kenya. This study did not examine the effect of teachers' time management on students' academic success. The current study seeks to establish the influence of class size on instructors' time management and what is its impact on students' academic achievement in Kwale County public secondary schools

Class size

One of the key elements of a setting for learning known to affect learning is class size, a factor over which the instructor has less or no control. In this research, "class size" refers exclusively to the number of learners that a single instructor is responsible for instructing in a classroom. For example, Canada, Australia, Romania, the Czech Republic, the United States, and Slovenia have a standard class size of less than 30 students; Turkey, the Netherlands, and Norway have a standard class size of 20 or less students; and there are typically more than 30 learners in each classroom in Singapore and Japan (Mokobia and Okoye, 2011). These are inside the recommended UNESCO limit of 25 learners per classroom

The argument over class size appears to be ongoing, as research has yielded mixed conclusions regarding its impact on student academic achievement. Woods (2015), on the other hand, believes that small courses may be advantageous in boosting student achievements. According to Blatchford, Moriaty, and Martin (n.d.), policymakers frequently make the case from an economic angle when they claim that class size does not matter. According to Mathis (2016) and Chingos (2013), the ongoing debate on class size appears to be related to education financing, specifically the number of instructors to be employed and compensated, and is a challenge for any government. According to O'Neil (2012), research

shows that increasing class size often results in worse or insufficient learning resources such as classrooms and increases instructors' workload. This is expected to have an impact on the education's quality. Additionally, schools, teachers, and parents all want lower classroom sizes since it is thought that this results in more individualized attention for each student from the teacher, which improves teaching and learning (Kariuki & Guantai, 2005).

Comparing class sizes across dissimilar countries indicates that In OECD members, lower secondary class sizes range from 19 to 32 students (OECD 2019). Finland, an OECD member country whose superb educational system has received recognition, has a STR of 13:1. When compared to STR in most African nations, the goal to create an education system that functions as well as in countries such as Finland may be a mirage. In Nigeria for effective teaching and learning in secondary schools, the National Policy on Education (2013) proposed that the standard class size in Nigeria be 40 students per class (Gabriel, 2018). Afolabi, B. Y., Wakili, L. B., Afolabi, A. O., Onwuegbunam, N. E., & Ademuwagun, A. A. (2020), on the other hand, observed that teachers currently had to cope with an average of 100 learners in a class in public schools and as many as 50 students in a class in some private schools across the country. Class sizes in Kenyan secondary schools are increasing, which may cause issues in class management, putting teachers in a tough position. The Student Teacher Ratio (STR) in government owned secondary schools had increased to 41:1 in 2012 (MoEST, 2014). The increased class size is attributable to a variety of variables, including an increase in population growth; Kenya's population growth rate is 2.5 percent, and 22 percent of the population is between the ages of 10 and 19 (UNICEF, 2013). Second, different educational reforms have resulted in far more citizens having access to education than previously existed. In 2003, Kenya adopted Free Primary Education (FPE), permitting many children who beforehand had no access to education to join primary schools (Ogola, 2010). This same demographic would eventually enroll in secondary schools, resulting in an expected rise in secondary school

enrollment but a development that was not entirely anticipated. The number of children transiting from elementary to secondary school increased significantly in 2008 as a result of the Free Day Secondary School Education (FDSE) program (Brudevold-Newman, 2017). 2018 saw the implementation of another educational reform known as the "100% primary to secondary school transition policy" (MoEST, 2015). Regardless of their performance on the end-of-primary-school national assessments, this policy enables all learners to continue their education in secondary school after completing primary school. Not all pupils stayed on to secondary school in the past since admission to secondary school was based on the learner's performance. Due to the aforementioned reforms in education, a significant increase in learners' population has been recorded at the secondary school level, with enrolment increasing from 2.1 million in 2013 to 2.9 million in 2018 (Kenya National Bureau of Statistics, 2019). The government anticipated the need for qualified teachers, support mechanisms, and improved physical and working circumstances in order to provide quality education (MoEST, 2005), all of which have yet to be completely implemented.

There have been studies to see if higher class sizes reduce educational quality. Educators and scholars from various philosophical backgrounds have long disputed the connection between student learning and class size. Many academics agree that smaller courses allow for higher quality teaching and learning (Anderman, 2009). Finn et al. (2003) agrees that Primary school kids who are in smaller classes are more focused on their studies and behave more quietly than those who are in larger ones. Other studies have examined the impact of class size on student attitudes, actions, and results. The grave problem is that few of this research have examined how class size influence teachers time management. The purpose of this study is to establish the Impact of class size on teacher's time management and its effect on Kwale County students' academic performance.

Statement of the problem

According to the background information, Kenya adapted international standards in order to achieve the Education for All (EFA) and Millenium Development Goals (MDGs) targets. Kenya was forced to reintroduce FPE in January 2003. In Kenya, the implementation of the FPE Policy in 2003 and the start of the Free Secondary Education Programme in 2008 more than doubled the number of students enrolled in both primary and secondary public schools. This issue has not only weakened teacher confidence, but it has also brought the topic of class size to the forefront of the country's educational and political agendas. There have been studies to see if higher class sizes reduce educational quality. Educators and scholars from various philosophical backgrounds have long disputed the relationship between student learning and class size. In recent years, Kwale County students Kenya Certificate of Secondary Examinations (KCSE) achievement has decreased. For example, just 2,517 (8%) of the 32,701 students who took the exam between 2016 and 2020 qualified for university admission. As a result, the question is whether class size has an effect on learner achievement. In light of this, the research issue of the effects of class size on teacher time management and its effect on students' academic performance in public secondary schools in Kwale County, Kenya became critical for this study.

Purpose of the study

The overarching goal of this study is to evaluate the impact of class size on instructors' time management and its impacts on students' academic achievement at the secondary public schools in Kwale County.

Research Question

To what extend does class size influence instructors' time management and what is its impact on students' academic achievement in Kwale County public secondary schools.

Scope of the study

According to Bernard and Parker (2021), delimitation requires specifying the study's bounds in order to make it manageable. The study was limited to Kwale County and focused on the impact of class size on instructors' time management and its impacts on students' academic development in Kwale County public secondary schools. The study was limited to public secondary schools because it was easier to acquire data from them than from private ones.

METHODOLOGY

A descriptive survey approach was utilized in the investigation. The method is ideal because it collects information from a large population, collects information on people's views, ideas, or habits, and provides for speedy data collection.

Target population

*Table 1: **Public Secondary schools per category in Kwale county***

Type of Schools	No. of schools
Day mixed	53
Boy's boarding	9
Girls boarding	13
Mixed boarding/day	11
Girls' Day	3
Boys' day	4
Special school	1
Mixed boarding	2
Boys' boarding/day	1
Girls boarding /day	1
Total	**98**

*Table 2: **Distribution of Public secondary schools in Kwale Sub Counties***

Sub county	Number of schools
Matuga	30
Lunga-Lunga	20
Msambweni	20
Kinango	10
Samburu	18
Total	**98**

Source CDE'S Office

Target Population.

Mugenda and Mugenda (2013) claim that a target population is a group of people or items with comparable qualities. Teachers were chosen because they are familiar with the influence of time management on academic success because they implement curricula. Because principals are the managers and implementors of learning in schools, they were considered. They were in charge of ensuring academic performance in the eyes of the Ministry of Education, thus their contribution was critical to the research. There are 98 public secondary schools are located in Kwale County (Ministry of Education, 2020). The study population was 98 public secondary schools' principals and 960 Teachers.

Sample and Sampling Techniques

Random sampling was employed on instructors while purposive selection was used to choose principals. Using the sample size chart developed by Krejcie and Morgan, the sample size for instructors was calculated. The sample size was 274 teachers due to the target demographic's 960 instructors.

Sampling of schools

According to Mugenda & Mugenda (2013) 30% of the population sample when the target population is less than 1,000 and 10% when the target population is more than 1,000 is regarded as a good representation.

From the Matuga subcounty, $30/100 \times 30 = 9$, or around 9

From the Lunga-Lunga subcounty $30/100 \times 20 = 6$, or around 6

From the Msambweni subcounty $30/100 \times 20 = 6$, or around 6

From the Kinango subcounty $30/100 \times 10 = 3$, or around 3

From the Samburu subcounty $30/100 \times 18 = 5.4$, or around

5

A total of 29 schools were picked using stratified random sampling. As shown in Table 3.

Table 3: sampling of schools

	National	Extra county	County	Sub county	Total
Matuga	2	3	2	2	9
Lunga Lunga	-	1	2	3	6
Msambweni	-	2	2	2	6
Kinango	-	1	1	1	3
Samburu	-	1	2	2	5
Total					29

Methods of data collection

Structured questionnaires were used to obtain the data needed to complete the investigation. Instructors and principals were given separate questionnaires. The questionnaires asked closed-ended questions and were primarily provided in a Likert Scale format. Closed-ended questions are typically quick to complete, keep respondents on topic, are reasonably objective, and are easy to tabulate (Eliason, 2016).

Methods of data analysis

Data analysis, according to Piper et al., (2014), is the act of converting a large volume of data into order, structure, and meaning. First, the information gathered was cleansed, classified, and assembled. The information was examined after being entered into a computer program (MS Excel). SPSS version 22 (Statistical Package for Social Scientists) was used for the data analysis. Multiple regression analysis was used to gauge how strongly each dependent and independent variable were related.

DATA ANALYSIS AND INTERPRETATION

Instructors and Heads of institutions in Kwale County were requested to rate their replies on a five-tier scale in order to collect data on the impact of their class size on academic performance of secondary school students 1- Strongly Disagree (SD),2- Disagree (D), 3-Neutral (N), 4-Agree (A),5- Strongly Agree (SA). The results are captured in Table 4

*Table 4: **Teachers and Principals response on Class Size***

Statement	Teachers					Principals				
	SD	D	N	A	SA	SD	D	N	A	SA
100% transition policy has resulted to bulging class size	2.0	4.8	20.8	59.6	12.8	0.0	2.4	25.0	58.8	13.8
The number of students in your class exceeds forty (40)	1.5	3.1	6.3	62.1	27.0	1.9	3.9	4.7	63.7	25.8
Large class has negative influence on instructional time.	1.0	2.1	9.2	34.9	52.8	0.0	13.50	10.0	58.82	17.68
Compared to smaller classrooms, you spend more time in larger classes.	1.1	5.2	13.3	52.8	27.6	0.0	0.0	0.0	88.2	11.8
Smaller class sizes lead to better student learning and results.	2.1	4.2	11.0	52.6	30.1	0.0	0.0	11.8	70.6	17.6
I cannot devote extra time to slow learners in overcrowded classrooms	1.6	1.9	3.9	37.6	55.0	2.4	4.4	5.0	76.5	11.8

The results from Table 4 on the instructors and heads of institutions responses on class size indicated that 59.6% of the instructors respondents and 58,8% of the heads of institutions respondents agreed that 100% transition policy had resulted in bulging class size 62.1% of the instructors and 63.7% of the heads of institutions agreed that the number of students in their classes exceeded forty (40) while 27% of the teachers and 25.8% of the principals strongly agreed that the number of students in their classes exceeded forty the results further indicated that 52.8% of the instructors and 58.82% of the heads of institutions agreed that large class size has negative influence on instructional time ,58.2% of the teachers respondents and 88.2 % of the heads of

institutions respondents agreed that more time is spent on larger classes compared to smaller classes ,Majority of the teachers and principals agreed that smaller class sizes lead to better student learning and results .76.5% of the principals and 55% of the teachers agreed that they cannot devote extra time to slow learners in overcrowded classes .

Table 5: Summary of Multiple Regression on the Influence of Class Size on Academic Performance

Variable		R^2	Adj R^2	Constant	Df	F	P-value
Dependent	Academic performance	.248	.238	13.213	6,234	53.305	.000*
Independent			Beta (β)	Regression coefficients		T	P
	Class size		.138	.377		12.996	.000*

(* means significant at .05 alpha level).

Results from table 5 on regression analysis reveals that class size and accounted for 24.8% (R2 =0.248) students' academic performance. The table further reveals that class size accounted for 24.8% of the total variation on students' academic performance.

DISCUSION OF THE RESULTS

In Kenya, the execution of the FPE Policy in 2003 and the start of the Free Secondary Education Programme in 2008 more than quadrupled the number of students enrolled in both Public elementary and secondary schools. Class sizes are getting out of hand, making it impossible for teachers to provide each learner the individualized attention they need. Parents, educators, school administrators, and lawmakers generally agree that smaller class sizes result in improved student learning and performance. However,

realistic data has not consistently backed this conventional thinking (Aturupane et al., 2018). Bosworth (2014) explains that the relationship between class size and student success is complicated, with numerous contradictory outcomes. Bosworth (2014) goes on to explains that class size has little effect on student success. These contradicts Rubin, & Wright, (2017) findings which suggested that when class size grows, student achievement decreases. This is in harmony with Shamim, & Kuchah, (2016) claim that large classrooms in developing nations, have a negative influence on two important and linked parts of a teacher's profession, namely instructional time and classroom management. This study concluded that time limitations had the greatest impact on the teaching of mathematics, reading, and writing, and that managing time between instructional activities and classroom management is a significant difficulty for many teachers. In their study Allen et al. (2015) concluded that 62 pupils per instructor was a threshold level, and that if class size exceeded 62, learning essentially halted. Studies by Nepal (2016) and Loh (2016), which revealed that crowded classroom environments hinder instructors' attention to specific students and decrease students' learning progress, corroborate this. Lol, (2016) opined that teachers only have time to cover the fundamentals and cannot devote extra time to slow learners. This corroborate Shamim, & Kuchah, (2016) who opined that teachers who have overcrowded or high-class sizes encounter challenges in providing excellent education. 58.2% of the teachers' respondents and 88.2 % of the principals' respondents agreed that more time is spent on larger classes compared to smaller classes this is in agreement with Wosyanju (2005) who opined that teaching large classrooms has an impact on instructors' morale, motivation, and self-esteem. The writer Furthermore, many teachers believe that while

teaching large classes, they spend too much time organizing class activities and not enough time fulfilling individual student needs. Quality lesson delivery may be challenging for instructors in such conditions, and quality learning may not occur.

CONCLUSION

Indeed, intellect is not the main factor of a student's academic accomplishment. These ascertains Rubin, & Wright, (2017) findings which suggested that when class size grows, student achievement decreases. This is in harmony with Shamim, & Kuchah, (2016) assertion that large classrooms in developing nations, have a negative influence on two important and linked parts of a teacher's profession, namely instructional time and classroom management. In conclusion, class size is an important element in affecting students' academic progress.

RECOMMENDATIONS

Based on the findings and data analysis, the researcher would like to provide the following suggestions.

The government should make it a top priority to limit classes to no more than (40) forty students. The Kenyan government must address the issue of class size as soon as possible by mobilizing resources to build more classrooms and hire more instructors. This will necessitate more educational finance concerns.

REFRFENCES

Afolabi, B. Y., Wakili, L. B., Afolabi, A. O., Onwuegbunam, N. E., & Ademuwagun, A. A. (2020). An investigation of class size on teaching and learning of mathematics in secondary schools (A Case Study of Chikun Local Government Area) of Kaduna State, Nigeria. *Journal of Education, Society and Behavioural Science*, *33*(10), 40-52.

Amalu, M.N &Nanjwan, J. (2019).Academic locus of control, study habit and secondary school students in academic achievement in mathematics. International Journal of Research and Scientific Innovation, 6(11), 19-23

Amalu, M.N &Ndifon, A. (2017). School violence and SS11 Students' academic achievement in Calabar Metropolis, Cross River State. Journal of the Nigerian Society of Educational Psychologists, 15(1), 223-230

Anderson, L.W. (2004). Increasing teacher effectiveness. Paris: UNESCO, International Institute for Educational Planning.

Ayeni, O. G., & Olowe, M. O. (2016). The Implication of Large Class Size in the Teaching and Learning of Business Education in Tertiary Institution in Ekiti State. *Journal of Education and Practice*, *7*(34), 65-69.

Chingos, M. M. (2013). Class size and student outcomes: Research and policy implications. *Journal of Policy Analysis and Management 32(2), 411-438.*

Elahi, N., & Hussein, M. (2015). Leadership for School and Education Culture. *Available at SSRN 2659802*.

Gabriel, A. O. I. (2018). Trends in the implementation of nigeria's national policy on

technical and vocational education and training: 1977-2014. *Journal of humanities of Social Sciences*, *7*, 71-88.

Kariuki, W., & Guantai, L. (2005). Class size: Effects on Achievement in East and Southern Africa. Paper presented at the Invitational Education Policy Research Conference, Paris, France (September 28th-October 2nd, 2005).

Kayode, G. M., & Ayodele, J. B. (2015). Impacts of teachers' time management on secondary school students' academic performance in Ekiti State, Nigeria. *International Journal of Secondary Education*, *3*(1), 1-7.

Khan, H. M. A., Farooqi, M. T. K., Khalil, A., & Faisal, I. (2016). Exploring Relationship of Time Management with Teachers' Performance. *Bulletin of Education and Research*, *38*(2), 249-263.

Kipkoech, C. K. (2017). Analysis of time management strategies for instruction in public secondary schools in Elgeyo Marakwet county, Kenya. *European Journal of Education Studies, 5* (3), 7-17).

Lizzio, A., Wilson, K. & Simons, R. (2002): University Students' Perceptions of the Learning Environment and Academic Outcomes: implications for theory and practice: Carfax Publishing – Taylor & Francis Group*: Studies in Higher Education Volume 27, No. 1, 2002.*

Maiyo, J. K., Akharunda, S. B., & Ndiku, J. K. (2018). Teacher qualification and primary school academic achievement in Khwisero sub county, Kenya.

Mathis, W.J. (2016). The effectiveness of class size reduction. Published by National Education Policy Centre, Colorado, U.S.A. http://nepc.colorado.edu/publication/research-based-options

Ndethiu, S. M., Masingila, J. O., Miheso-O'Connor, M. K., Khatete, D. W., & Heath,

K. L. (2017). Kenyan secondary teachers' and principals' perspectives and strategies on teaching and learning with large classes. *Africa Education Review*, *14*(1), 58-86.

Ngando, N. (2011). Performance Management in Kenyan Public Schools: Implications and Challenges. European Journal of Educational Sciences 4(3), 19 – 35, 2017

O'Neil, J.G. (2012). The effects of class size on teaching and learning. Massey University, College of Education, Te Kupenga UTE, Mataurango https://www.researchgate.net/Publications/315694783

Oketch, M., & Ngware, M. (2010). Free primary education still excludes the poorest of the poor in urban Kenya. *Development in Practice*, *20*(4-5), 603-61

Woods, D. (2015). The class size debate: What the evidence means for education policy. *Goldman School of Public Policy, University of California, Berkeley.*

Wosyanju, M. G. (2005). Assessment of large classes. *Management*, *50*(200), 295.