

Teachers' Instructional Workload Management and Students' Academic Performance in Public and Private Secondary Schools in Akoko North-East Local Government, Ondo State, Nigeria

Adeolu Joshua Ayeni, Ph.D

Department of Educational Management

Adekunle Ajasin University

Akungba-Akoko, Ondo State

Nigeria

E-mail: ayeniadeolu@yahoo.com

GSM No. +2348139654848

Arinze Prince Amanekwe

Department of Educational Management

Adekunle Ajasin University

Akungba-Akoko, Ondo State

Nigeria

E-mail: arinzechukwuamanekwe@gmail.com

GSM No. +2348071920901

Received: November 16, 2018

Accepted: November 25, 2018

Online Published: December 2, 2018

Abstract

The study examined teachers' workload and determined its implication on students' academic performance in secondary schools in Akoko North East Local Government Area of Ondo State. Descriptive design of the survey type was adopted and a stratified random sampling was used to select 12 schools, which were 6 public and 6 private secondary schools, involving 132 participants who included 120 teachers and 12 principals. A self-constructed questionnaire titled "Teachers' Workload and Student's Academic Performance Questionnaire" (TWSAPQ), was administered. Five (5) hypotheses were tested using Pearson's product moment correlation (PPMCC) and T-test at $p < 0.05$ level of significance. The results showed that there was a negative correlation between teachers' workload and students' academic performance ($r = -0.420$), and a disparity between teachers' actual workload and workload policy standard ($t = 27.219$), also there was significant difference in teachers' workload between public and private secondary schools ($t = 2.364$). The findings indicated that teachers' workload is high in teaching activities (75.8%), data imputation (62.5%), and marking of students' scripts (76.7%), and impacted negatively on teachers' instructional tasks performance and students' academic performance. It is hereby recommended that the State Government and proprietors of private secondary schools should employ adequate number of qualified teachers to meet the workload standard for effective teaching, while learning facilities should be upgraded to enhance workload implementation and improve students' academic performance in secondary schools.

Keywords: Teacher's workload, class size, teaching subjects, school policy, students' performance

1. Introduction

Public secondary schools are institutions established and funded by the government and administered by principals who are appointed by the government to superintend over teachers and students. On the other hand the private secondary schools are institutions established, funded and managed by the private sector (individuals and non-governmental corporate organizations). Both the public and private secondary schools operate the same curricula for the purpose of training students for higher education and useful living in the society. The attainment of the set educational goals depends largely on effective and efficient management of teachers' instructional workloads in secondary schools.

Teachers' instructional workload management is the process of allocating subjects, periods and other administrative duties on curriculum planning, implementation and reviews to teachers depending on their area of specializations, professional knowledge, skills and experiences which determine the quality of instructional tasks performance. This also has significant impact on the level of students' academic performance and the overall achievement of educational objectives in the school system.

Teachers' instructional workload is expressed in terms of curriculum organization, lesson note preparation, learners' engagement in curriculum instructions, continuous assessment and class management. Teachers' instructional workload is directly measured by the total number of teachers that are available in the system against the number of students that are taught, the number of scripts that are marked, and other responsibilities considered worthwhile by the school principal that are regularly or occasionally assigned to teachers. The extent to which students have achieved educational goals in terms of academic performance depends largely on how well teachers carry out their instructional tasks. Teachers with moderate instructional workloads are said to be more effective and efficient than teachers with heavy workload in the secondary school system.

Teachers' instructional workload is faced with serious challenges which among others include shortage of teachers, lack of instructional materials, students' over-enrolment, high number of teaching periods per week, lack of well-equipped laboratories and large class size without instructional technology affect students' academic performance in secondary schools. These challenges need to be professionally addressed by principals and other stakeholders in education.

The school principal being an instructional leader occupies an important position in the management of teachers' workloads. It is therefore expected that principals should consider variables such as teachers' area of specializations, professional competence and class size, and the recommended teacher-student ratio which ranged between 35 and 40 students per class (Federal Republic of Nigeria, 2013). It is necessary therefore for the school principal to work out the most efficient method in assigning workloads that will enable the teachers put in their best towards achieving the desired output/ result.

Effective management of teachers' workload is necessary because teachers, first and foremost must be seen from the angle of humans who have emotions and can be stressed, depressed, agitated and get bored if overworked. Based on these reasons, Ukeje (1992) viewed excellent management as "knowing exactly what the manager want employees to do and seeing that they do it in the best cheapest way". The problem in the way schools are managed lies in the non-adherence of government to its policy on teachers' workloads which 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.

The Nigerian national policy on education stipulated that "no education system can rise above the quality of its teachers" thus implying the important role played by teachers in facilitating teaching and learning, and determining the quality of education service delivery. However, every poor performance of students is usually blamed on the teachers by the management while teachers also complained of excessive workload. This perhaps has been caused by the ever-increasing students' population and expansion of subjects in the curriculum, which placed more responsibilities on teachers and over-stretched them beyond their manpower carrying capacity thus resulting in overbearing workloads.

This study is significant as it will reveal the current state of teachers' instructional tasks performance and implication on students' academic performances. This study would indicate a warning signal for the educational planners, school administrators, human resource managers, and providers of education services to take a holistic view and diagnostic analysis of teachers' workloads in order to strengthen the teaching staff capacity, provide adequate instructional resources and implementing reasonable workload policy to minimize stress and improve teachers' instructional tasks performance and students' academic performance in secondary schools.

2. Theoretical Framework on Teachers' Workload

The management of teachers' instructional workload is an important aspect of school management that can make or mar the attainment of the educational goals. Instructional workload distribution is expected to be guided by the arousal theory that considered the basic energetic state of an organism (Razmjou, 1996). As the school management mobilizes and regulates the human stress response with moderate level of arousal (often used synonymously with stress) results in optimal performance, whereas too little arousal or too much arousal will degrade performance (Staal, 2004).

3. The Concept of Workload

Ksenia (2012) described workload as tasks performed in the working environment exceeding personal capabilities and resulting in threats, and the reactions of nervousness, anxiety, frustration, pressing, or annoyance. Such reactions

would change the physical and mental conditions of a normal person as well as the behaviour in carrying out the assigned tasks in an organization.

Marina (2012) considered workload as role overload/personal work extended from single item to multiple duties, and the risk of overload resulted in emotional exhaustion of employees, delaying work, low team spirit, and not obeying rules, which could have negative impact on the overall organization performance.

4. Determinants of Teachers' Instructional Workload

The various ways of measuring teachers' workload among others include class size, subject areas, condition of service, school policy, teaching staff strength and teachers' abilities. These factors are explained in the conceptual framework below.

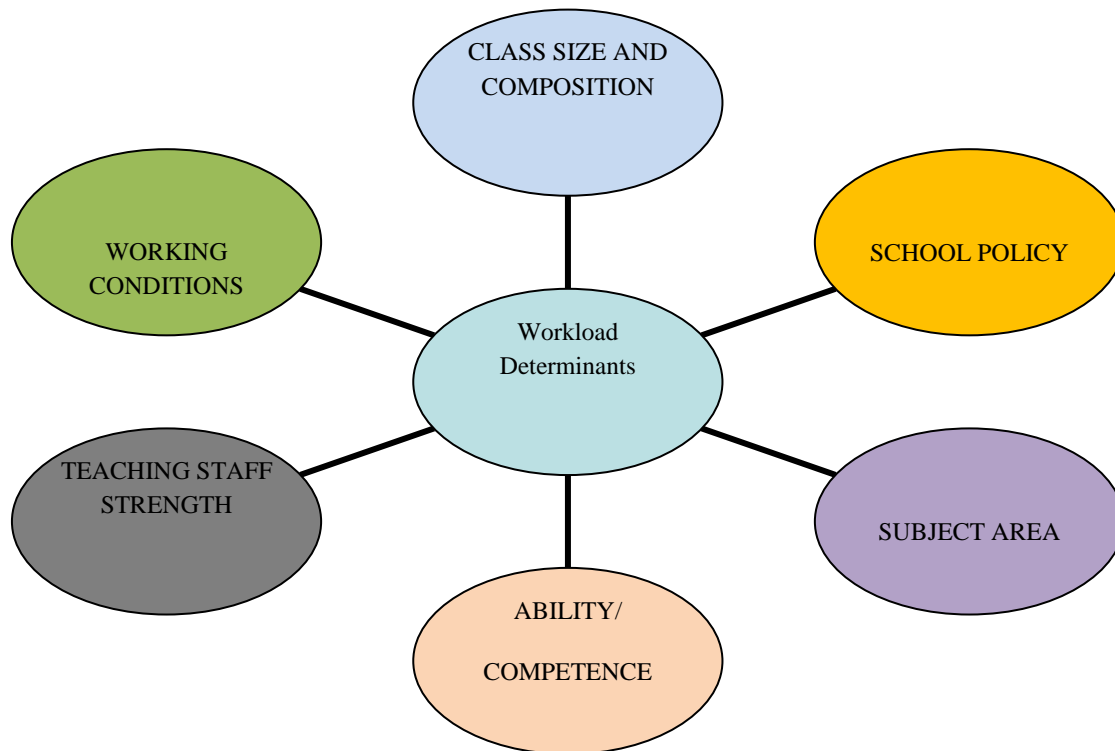


Figure 1. *Conceptual framework on workload determinants*

Source: Researchers' illustration

4.3.1. Class size and composition

Class size as one of the sub-variables of school quality exerted significant influence on teachers' instructional workload in terms of lesson planning, teaching, assessment of students' academic performance and classroom management (Wosyanju, 2005; Osim, 2009). Class workload could lead to burnout if not properly managed; consequently leading to the failure in the completion of academic curriculum and poor academic performance of students. Large class size that is not supported with technology poses serious challenge to the teaching-learning process as teachers sometimes have real difficulty in dealing with students on individual bases.

The Nigerian National Policy on Education (Federal Republic of Nigeria, 2013) stipulated that a class size in secondary schools should have a ratio of 1:40. Regrettably, classes are very large especially in urban schools in Nigeria that teachers often find it difficult to recognize their students by names and teachers have limited spaces for instructional tasks performance in congested classes. This situation limits teacher-learners interaction, learner-learner interaction, and impedes academic, psychological, guidance or counseling services for students on individual bases where necessary.

Goodrum, Hackling and Rennie (2001) in their studies revealed a correlation between class size and the quality of teaching and learning among schools in Australia. However, earlier study conducted in Australia in 1984 and 1994, revealed that workload increased as a result of longer working hours, teaching more students and having more professional, pastoral and administrative duties to perform (Easthorpe & Easthorpe, 2000).

4.3.2. Subject Area

Core courses in the secondary schools such as Mathematics, English, and subjects in the Sciences which require high level cognition and/or effort to comprehend and interpret are also causing increase in teachers' workloads. According to findings by Mbugua, Kibet, Muthaa & Nkonke (2012), 66.7% of Mathematics teachers teach between 16 to 30 lessons, while 27.8% teach more than 30 lessons in a week. This indicates that 27.8% of mathematics teachers are overloaded. In order to help students, teachers go extra length in the preparation of lessons and most times organize remedial and after-school lessons for students who could not catch up with the formal class instruction.

4.3.3. Conditions of Work or Service

Certain factors inherent in the way the work is organized constitute sources of restraints that require additional actions and coping strategies, which in turn have consequences for both the individuals and their effectiveness at work. Every institution has certain rules and regulations which need to be followed by the employees. Relating the incidence of excessive workloads to private schools, Sultana, Bano & Shafa, (2012) observed that there are very strict rules in private schools. They posited that some of these rules relate to teachers' punctuality, collection of fees, extra lessons, developing lesson plans and partaking in some other unidentifiable tasks that are termed as unnecessary by the school management and teachers. Sometimes teachers could not follow these rules and the principals reprimanded them.

4.3.4. School Policy

Teaching according to section 7.2.3(a) of the Nigerian Teachers' Service Manual (1990) is twenty-four hour service. A teacher in the school system is therefore on call twenty four hours a day. The 'b' part of it stated further that the teaching load for a post-primary school teacher shall be between the range of 15 and 25 periods per week or such minimum as the Ministry of Education or the School Board may from time to time prescribed. The provisions of the workload policy determines the extent of work that would be assigned to any worker, also, if workload policy statement is not followed to letter, it could amount to principal assigning additional tasks to teachers. In a survey on workload pressure in 2010 by New Zealand Post Primary Teachers' Association, nearly 50% of teachers reported an increase of workload arising from the national standards (New Zealand Post Primary Teachers' Association, 2010). Effective workload management in the educational system requires the ability of the school principal in applying the following variables: equity, transparency, prioritize activities, appropriate work-life balance, prompt response to short term changes in staff resources and work demands, consistency in staff resource allocation to teaching programmes and course review, and measured data which can be used for the purposes of recognition, reward and promotion of teachers.

4.3.5. Teaching Staff Strength

Teachers' workload continues to increase in the face of emergent demand for education by all and sundry. The equilibrium which is based on students-teaching staff strength ratio is required in the supply of teaching manpower. The distribution of workload by the principal is dependent on the available manpower. Where this is small, the workload will be high per teacher and some work will be left undone. This is responsible for variation (small, moderate, high) in teachers' workload. Teachers' productivity is directly related to the workload assigned to them. When the number of teachers is inadequate, there is excess workload.

4.3.6. Abilities

Vroom (1964) stated that ability is an individual's capability to complete tasks and it is a stable trait. Halim, Diane, Catherine, and Shrout (2012) mentioned that work performance is the combination of mental and physical capability of an individual to complete a task, Francoise and Winterton (2005) explained that ability is competence that touches on knowledge and skills. They explained ability as involving four dimensions, namely, cognitive, functional, social and meta. The level of knowledge is explained by the cognitive competence, level of skill by functional competence, social competence explains the behaviour and attitude of individual workers, while meta competence is related to ability to acquire these competencies through the individual's own knowledge.

5. Teachers' Workload and Students' Academic Performance

Academic performance of a student can be regarded as the observable and measurable behaviour of a student in terms of scores obtained from a teacher-made test, terminal examinations and external examinations such as the West African Senior School Certificate Examinations (WASSCE), National Examinations Council (NECO) and so on.

Teachers' workload has direct impact on students' academic achievement. However, overworked teachers are less likely to bring the energy, insights and resilience, positive and caring relationships that effective teaching requires in the classroom (Grenata, 2014). These prevailing conditions would definitely show a negative influence on the instructional quality in schools, which may translate into poor attitudes and values, and low academic performance of students in secondary schools.

Ayeni and Afolabi (2012), stated that the teacher's role in the instructional process is sine qua non, the teacher is expected to provide essential inputs like adequate planning of lesson notes, effective delivery of lessons, proper monitoring and evaluation of students' performance, providing regular feed-back on students' performance, improvisation of instructional materials, adequate keeping of records and appropriate discipline of students to produce and enhance expected learning achievement in secondary schools, all of which forms part of teachers' workloads on a daily basis. However, the poor condition of learning infrastructure and lack of instructional materials impede effective teaching-learning process.

Poor academic performance of students in Nigeria has been further linked to poor teachers' performance in terms of accomplishing the teaching tasks, negative attitude to work and poor teaching habits (Ofoegbu 2004).

6. Statement of the problem

Teachers' instructional workloads determine to a great extent the level of students' academic performance and the quality of education. However, there is a general public outcry over the deteriorating level of quality of education as reflected in the low level of students' academic performance in WASSCE which is often below 50% in Nigeria.

The perceived inequality in workload distribution has the potential to create feelings among teachers who have excess workloads that they are being treated unfairly. This could be partly attributed to non compliance with workload policy resulting in overstretching the available teaching staff strength in varying dimensions; almost all official time is devoted to the classroom instruction. In reality; such feelings impede and lower the standard of instructional tasks performances and students' academic achievement.

The craziness for profit-making over standard among many private investors in education with their erroneous orientation of "the more students' population, the more money realized" with little consideration for instructional technology and adequate number of teachers impede the quality education. The identified gaps portend serious danger for the education system and perhaps been responsible for the inadequacies in teachers' instructional tasks performance and low academic performance of students in Nigerian secondary schools.

This study therefore sets out to investigate the criteria used by principals in allocating instructional workloads to teachers and examine its adequacy or otherwise, with a view to determining the implication on teachers' instructional tasks performance and students' academic performance in secondary schools, using Akoko North East Local Government Area of Ondo State, Nigeria as a case study.

7. Research Questions

- i. What are teachers' perceptions on workload allocation in secondary schools?
- ii. What are the factors influencing teachers' workload in secondary schools?
- iii. Are teachers' actual workloads consistent with workload policy standard?
- iv. What types of class size exist in secondary schools?
- v. How are workloads distributed to teachers in secondary schools?
- vi. What is the difference between public and private teachers' workloads in secondary schools?
- vii. What are teachers' perceptions of tasks performance in secondary schools?
- viii. What intervention strategies are provided to improve teachers' workload?

8. Research Hypotheses

- i. There is no significant relationship between teachers' workload and students' academic performance in secondary schools in Akoko North East Local Government Area of Ondo state, Nigeria.
- ii. There is no significant relationship between teachers' workload distribution and workload implementation in secondary schools.
- iii. There is no significant relationship between class size and teachers' workload in secondary schools in Akoko North East Local Government.
- iv. There is no significant difference between actual teachers' workload and workload standard in secondary schools .
- v. There is no significant difference between teachers' workload in public and private secondary schools in Akoko North East Local Government.

9. Research Method

The study adopted the descriptive design of the survey type. The researcher used stratified random sampling to select 12 secondary schools (6 public and 6 private) which represented about 40% of the entire secondary schools in Akoko North-East Local Government Area. A total of 120 respondents were randomly selected, with a random

selection of 10 teachers in each of the 12 schools that were sampled for the study. The principals of the 12 schools were purposively selected.

Data was collected using self-developed questionnaire titled: "Teachers' Workload and Students' Academic Performance Questionnaire (TWSAPQ). A 5- point Likert scale was adopted to elicit information from the respondents, using Strongly Agree (SA), Agree (A), Fairly Agree (FA), Disagree (D), and Strongly Disagree (SD) with the value of 5, 4, 3, 2, and 1 respectively. The questionnaire was divided into sections A-H which included a profoma which was used to collect data on students' academic performance. The questionnaire was validated both in face and content by experts in the Department of Educational management, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria. The test-retest method was used to determine the suitability of the research instrument while Cronbach's alpha was used in determining the internal consistency of the research instrument, which yielded a coefficient of $r = 0.84$.

The research instrument was administered on principals and teachers in the selected schools by the researchers. In a bid to achieve a 100% rate of return of questionnaires, the researchers waited while respondents filled the questionnaires, also phone contacts of those who could not fill the questionnaires at the spot were collected and appointments for the collection of the completed questionnaires were made. Descriptive statistics (Frequency counts, percentage and multiple bar charts) were employed to present responses on the research questions, while Pearson Product Moment Correlation (PPMC) and T-test were used to test the hypotheses at 0.05 level of significance.

10. Results

The results and discussions of data analyses are presented in two parts based on the research questions and hypotheses that were formulated for the study. Data collected on research questions were analyzed using frequency count and percentage, while hypotheses were tested at 0.05 level of significance using Pearson Product Moment Correlation Coefficient (PPMCC), and T-test statistics. The results are presented in tables 1 – 13.

Research Question 1. What are teachers' perceptions on their workload allocation?

Table 1. Teachers' perceptions on workload allocation in secondary schools

S/N	Items		SA	A	FA	D	SD	TOTAL
1	Your workload as a teacher is very high	Freq.	55	34	18	7	4	120
		%	(47.5)	(28.3)	(15.0)	(5.8)	(3.3)	(100)
2	You often carry over undone tasks to the next day	Freq.	23	31	23	27	16	120
		%	(19.2)	(25.8)	(19.2)	(22.5)	(13.3)	(100)
3	You do some of your official work at home	Freq.	46	63	4	3	4	120
		%	(38.3)	(52.5)	(3.3)	(2.5)	(3.3)	(100)
4	Duties are always delegated to you in particular	Freq.	31	46	18	13	12	120
		%	(25.8)	(38.3)	(15.0)	(10.8)	(10.0)	(100)
5	Your administrative duties affect the quality of your instruction	Freq.	21	15	21	40	24	120
		%	(17.5)	(12.5)	(16.7)	(33.3)	(20.0)	(100)

Source: Field survey

The analysis of data in table 1 and figure 1 on teachers' workloads revealed that the percentage points recorded for strongly agree (17.5 - 47.5%) and agree (12.5 – 52.5%) were greater than the percentages recorded in fairly agree (3.3 - 19.2%), disagree (2.5 – 33.3%) and strongly disagree (3.3% - 20%). These indicated that most of the teachers' workloads were very high as reflected in percentage points of strongly agree and agree responses combined in items 1, 3 and 4.

Research Question 2. What are the factors influencing teachers' workload in secondary schools?

Table 2. Factors influencing teachers' workload in secondary schools

S/N	Items		SA	A	FA	D	SD	Total
-----	-------	--	----	---	----	---	----	-------

1	You set goals for yourself and achieve them	Freq.	56	58	2	1	3	120
		%	(46.7)	(48.3)	(1.7)	(0.8)	(2.5)	(100)
2	Parents usually hold you accountable for the performance of their wards	Freq.	27	49	19	17	8	120
		%	(22.5)	(40.8)	(15.8)	(14.2)	(6.7)	(100)
3	Protocols and bureaucracies makes tasks burdensome	Freq.	24	34	29	25	8	120
		%	(20.0)	(28.3)	(24.2)	(20.8)	(6.7)	(100)
4	Frequent supervision makes tasks more demanding	Freq.	31	62	7	17	3	120
		%	(25.8)	(51.7)	(5.8)	(14.2)	(2.5)	(100)
5	The new curriculum influenced your workload	Freq.	38	58	10	11	3	120
		%	(31.7)	(48.3)	(8.3)	(9.2)	(2.5)	(100)
6	Frequent changes in school policies influence your workload	Freq.	50	46	8	10	6	120
		%	(41.7)	(38.3)	(6.7)	(8.3)	(5.0)	(100)

Source: Field survey

The analysis of data in table 2 on factors influencing teachers' workloads revealed the following percentage points strongly agree (20.0 – 46.7%), agree (28.3 – 51.7%), fairly agree (1.7 - 24.2%), disagree (0.8 – 20.8%) and strongly disagree (2.5 - 6.7%). These indicated that most of the teachers worked under strict supervision as reflected in percentage points of strongly agreed (25.8%) and agreed (51.7%) in item 4, while changes in school policy had serious implications on teachers' workload as indicated in strongly agreed (41.7%) and agreed (38.3%) in item 6.

Research Question 3. Are teachers' actual workloads consistent with National workload standard?

Table 3. Analysis of Teachers' Workload Standard

No. of Period Allocated Per week.	No. of teachers involved.	%	Remarks
1-5	4	3.33	Low
6-10	10	12.0	Low
11-15	16	13.3	Low
16-20	25	20.8	Moderate
21-25	44	36.67	Moderate
26-30	11	9.16	Outrageous
31-35	3	2.5	Outrageous
36-40	5	6.0	Outrageous
41-45	2	1.66	Outrageous
Total	120	100%	

Source: Field survey

The analysis of data in table 3 on National workload standard revealed that teachers' workload are not evenly distributed while 25.0% of teachers have their workload below the specified standard of 15-25 periods per week. This implied that there is no absolute compliance with the expected workload standard in secondary schools.

Research question 4. What type of class size exists in secondary schools?

Table 4. Class size and teachers' workload

S/N	Items		SA	A	FA	D	SD	Total
1	High level of infrastructure means fewer work to do	Freq.	43	44	5	11	17	120
		%	(35.8)	(36.7)	(4.2)	(9.2)	(14.2)	(100)
2	Having large classes increases	Freq.	65	34	8	7	6	120

	your work demands	%	(54.2)	(28.3)	(6.7)	(5.8)	(5.0)	(100)
3	Inaccessibility and proximity to school learning facilities influence your work intensity	Freq.	55 (45.8)	45 (37.5)	11 (9.2)	7 (5.8)	2 (1.7)	120 (100)
		%						
4	The school needs more learning infrastructure to improve teacher workload	Freq.	75 (62.5)	33 (27.5)	4 (3.3)	5 (4.2)	3 (2.5)	120 (100)
		%						
5	You devote more time on larger classes than smaller classes	Freq.	55 (45.8)	31 (25.8)	7 (5.8)	10 (8.3)	17 (14.2)	120 (100)
		%						

Source: Field survey

The analysis of data in table 4 on class size and teachers' workload revealed that the work demands of most teachers increased as they taught large classes as revealed in strongly agreed (54.2%) and agreed (28.3%) in item 2. Large classes take more instructional time than smaller classes as revealed in strongly agreed (45.8%) and agreed (25.8%) in item 5.

Research Question 5. How are workloads distributed to teachers?

Table 5. Principals' responses on workload distribution to teachers.

S/N	Items		YES	NO	Total
1	There is no general teacher workload policy standards	Freq.	6	6	12
		%	(50.0)	(50.0)	(100)
2	Male teachers are assigned more tasks than female teachers	Freq.	7	5	12
		%	(58.3)	(41.7)	(100)
3	The salary that a teacher receives determine the workload	Freq.	6	6	12
		%	(50.0)	(50.0)	(100)
4	You consider teacher experience in assigning duties	Freq.	8	4	12
		%	(66.7)	(33.3)	(100)
5	Age factor is considered in workload distribution	Freq.	7	5	12
		%	(58.3)	(41.7)	(100)

Source: Field survey

The analysis of data on table 5 revealed that 50% of principals have awareness of workload policy. 58.3% male teachers were assigned more tasks in most of the schools. 66.7% teachers' years of experience determined workload allocation in most schools.

Research Question 6. What is the difference between public and private school teachers' workload?

Table 6. Teachers' workload distribution in private and public secondary schools

Type of school	Number of periods taught in a week	Number of teachers involved.	Average workload
Public	1145	60	19

Private	1253	60	21
----------------	------	----	----

Source: Field survey

Data analysis on table 6 showed that teachers in private schools have a higher workload compared to teachers in public schools on a weekly basis. Teachers in public secondary schools have an average of 19 periods per week while teachers in the private secondary schools have an average of 21 periods per week. On a general note, workloads of private school teachers are higher than public school teachers.

Research Question 7. What are teachers' perceptions of tasks performance in secondary schools?

Table 7. Teachers' perception on tasks performance in secondary schools

S/N	Items	NECESSARY %	UNNECESSARY %	TIRING %	TIME CONSUMING %
1	Teaching activities	22 (5.8)	2 (1.6)	2 (1.6)	94 (75.8)
2	Recording, inputting data analysis	11 (6.5)	1 (0.8)	36 (26.7)	75 (62.5)
3	Marking of students scripts	13 (18.3)	(16.7)	92 (76.7)	6 (5.0)
4	Administration and supports	106 (88.3)	4.8	4.0	2.5
5	Staff meetings	102 (82.3)	3 (2.4)	3 (2.4)	5 (9.6)
6	Reporting on student progress	107 (86.3)	5 (4.0)	2 (3.2)	2 (3.2)
7	Curriculum review initiative	103 (83.1)	9 (7.3)	2 (3.2)	2 (3.2)
8	Improvisation of instructional materials	96 (77.4)	5 (4.0)	1 (2.4)	9 (12.9)
9	Co-curricular activities	89 (71.8)	6 (6.5)	8 (9.2)	2 (3.2)
10	Feedback to parents and home contact	87 (70.2)	19 (15.3)	6 (7.2)	4.0
11	Disciplinary works	97 (78.2)	17 (13.7)	2 (2.4)	2 (2.4)
12	Supervising lunch/break times	69 (55.6)	36 (29.0)	6 (5.6)	8 (6.5)
13	Guard duties	79 (63.1)	27 (21.8)	9 (8.1)	4 (3.2)
14	Assembly function	98 (79.0)	16 (12.9)	3 (2.4)	3 (2.4)
15	Completing incidence/ad-hoc report	83 (66.9)	22 (17.7)	7 (6.2)	6 (4.8)
16	Pre-term briefings	88 (71.0)	19 (15.3)	6 (4.8)	7 (5.6)
17	Invigilation of external examinations	82 (66.1)	28 (22.6)	2 (1.6)	5 (6.4)
18	Collection of fees/dues	38 (30.6)	79 (63.7)	2 (1.6)	1 (0.8)

Source: Field survey

Result of data analysis on table 7 revealed critical areas of teachers' overload with the following percentage points: Teaching considered to be time consuming (75.8%), data imputation is time consuming (62.5%), and marking of students' scripts is tiring (76.7%).

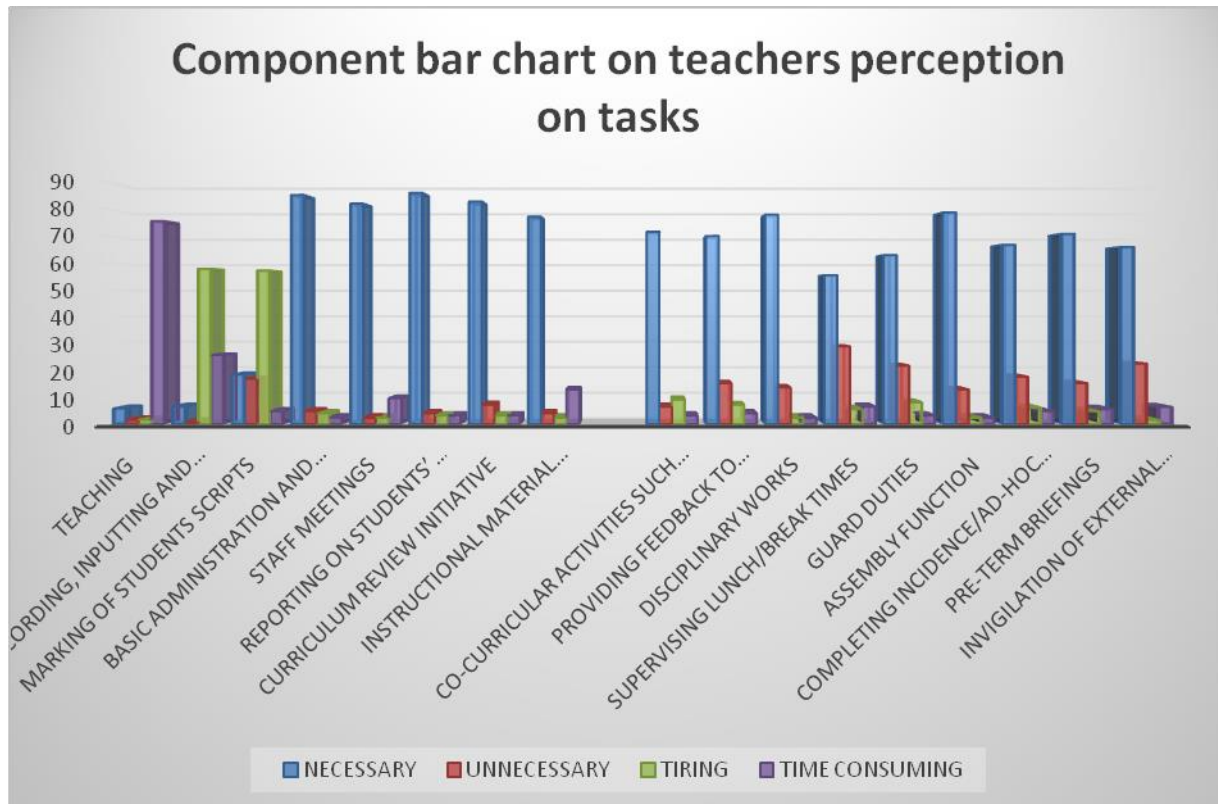


Figure 1. Component Bar chart on teachers' perception on tasks performance.

Research Question 8. What intervention strategies are provided in tackling teachers' excess workload?

Table 8. Intervention Strategies for tackling teachers' excess workload

S/N	Items	ADEQUATE %	INADEQUATE %
1	Modifying marking requirements.	93(75.0)	27 (21.8)
2	Reduction of administrative duties.	84 (67.7)	36 (29.0)
3	Employing teachers to fill vacant positions.	91 (73.4)	29 (22.6)
4	Hiring part-time teachers.	59 (46.8)	61 (49.2)
5	Improving teamwork among teachers and across departments.	95 (76.6)	25 (20.2)
6	Clarification of goals by school heads.	101 (81.5)	19 (15.5)

7	Reviewing remuneration packages.	67 (54.0)	53 (42.7)
8	Encouraging parent involvement and support services.	93 (75.0)	27 (21.8)
9	Improvement of information technology systems.	84 (67.7)	36 (29.0)

Source: Field survey

The analysis of data in table 8 revealed that modification of marking requirements were adequate (75.0%), reduction of administrative duties were adequate (67.7%), team work across staff and departments was adequate (76.6%), clarification of school goals by school heads reduced teachers' workload (81.5%). Parental involvement reduced teachers' workload (75.0%) and improvement in information technology systems enhanced teachers' workload (67.7%).

Hypothesis 1. There is no significant relationship between teachers' workload and students' academic performance in secondary schools.

Table 9. Relationship between teachers' workload and students' academic performance

Variables	N	Mean	SD	r-cal	r-crit	P<0.05
Teachers' workload	120	20.3700	7.82724	-0.420	0.256	0.000
Students' academic performance	120	60.7600	12.11320			

P<0.05

Results of data analyzed on table 9 shows a negative correlation between teachers' workload and students' academic performance ($r\text{-cal} = -0.420 < r\text{-crit} = 0.256$) at df 118 at $p < 0.05$ alpha level. Therefore the null hypothesis that there is no significant relationship between teachers' workload and students' academic performance is accepted.

Hypothesis 2: There is no significant relationship between workload distribution and workload implementation in secondary schools.

Table 10. Relationship between workload distribution and level of workload implementation

Variables	N	Mean	SD	r-cal	r-crit	P<0.05
Workload distribution	120	27.0583	9.37662	0.211	0.11	0.021
Workload implementation	120	12.8667	4.01872			

P<0.05

The result on table 10 showed that the calculated r-value (0.211) is greater than r-critical value (0.11) at $p < 0.05$ is significant. Hence, the null hypothesis (H_0) is rejected while the alternate hypothesis (H_a) is accepted. This implied that there is significant relationship between teachers' distribution and workload implementation.

Hypothesis 3. There is no significant relationship between class size and teachers' workload in secondary schools.

Table 11. Relationship between class size and teachers' workload in secondary schools

Variables	N	Mean	SD	Df	r-cal	r-crit	P<0.05
Teacher workload	120	27.0583	9.37662	118	0.096	0.139	0.296
Class size infrastructure	120	9.6417	3.96581				

P<0.05

The result on table 11 showed that the calculated r-value (0.096) is less than r-critical value (0.139) at $p < 0.05$ is not significant. Hence, the null hypothesis (H_0) is accepted while the alternate hypothesis (H_a) is rejected. This implied that there is no significant relationship between teachers' workload and class size.

Hypothesis 4: There is no significant difference between teachers' actual workload and workload standard in secondary schools.

Table 12. Test of difference between teachers' actual workload and workload standard

Variables	N	Mean	SD	Df	t-cal	t-crit	P<0.05
Teacher actual workload	120	20.1261	7.66519	118	27.219	2.052	.000
Workload standard	120	1.0000	.00000				

P<0.05

The result on table 12 indicated that there was a significant difference ($t\text{-cal}=27.219 > t\text{-crit}=2.052$) at 118 degree of freedom and at 0.05 level of significance. Hence, the null hypothesis (H_0) is rejected while the alternate hypothesis (H_a) is accepted. This implied that there is significant difference between teacher actual workload and workload standard.

Hypothesis 5: There is no significant difference between teachers' workload in public and private secondary schools.

Table 13. Test of difference between teachers' workload in public and private schools

	Type of school	N	Mean	SD	t-cal	t-crit	P<0.05
Workload	Public	60	25.3833	8.72381	2.364	1.964	0.20
	Private	60	29.2931	9.24332			

P<0.05

Results of data analyzed on table 13 above showed a significant difference in teachers' workload between private and public secondary schools ($t\text{-cal}=2.264 > t\text{-tab}=1.96$) at 118 degree of freedom and at 0.05 level of significance. The hypothesis that there is no significant difference in the workload of teachers between public and private secondary schools is rejected, while the alternate hypothesis is accepted.

11. Discussion of Findings

The result of data analysis on hypothesis one showed a negative correlation between teachers' workload and students' academic performance ($r\text{-cal}=-0.420$). This implied that teachers' workloads have increased beyond their capacity and students' academic performance is relatively low. The excess workload overstretched teachers' instructional tasks and account for the low academic performance of students due to the inadequacies inherent in teachers workload.. This finding agrees with those of Naylor and Malcolmson (2001) who reported that teachers had to adjust their teaching methods to enable them cope with the pressure of the workload. The finding from this study also agrees with the findings of Nwikina and Nwanekezi (2010) that in the federal capital territory (Abuja), teachers' high workload hindered students' academic performance but when workload was reduced, students' performance improved.

The study by Olaoye (2012) on the relationship between teachers' workload and students' academic performance indicated a negative coefficient of $r=-0.235$. The contrast was attributed to teachers' inability to cover the school syllabus and improper teaching due to the myriad of responsibilities assigned to teachers. The implication is that students who repeat a class create additional tasks for teachers.

The result of data analysis on hypothesis two revealed a relationship between workload distribution and the level of workload implementation ($r\text{-cal}=0.211$). The ineffective implementation of teachers' workload affects instructional task performance. Also, supervisory pressure, large class size and unstable workload distribution policy increase teachers' workloads.

Accountability to parents and school administrators increased workload pressure for many teachers. The demand for in-depth reports by parents and other authorities are very intense and stressful for teachers. The analysis of data in table 7 indicated that 75.8% of teachers perceived teaching as time consuming, while keeping of students' data is highly demanding (86.3%), and marking of scripts also seen to be a demanding task (76.7%). This finding corroborated the finding by Kolawole (1982) that a negative relationship exists between the class size and students' academic performance. Teachers' workload becomes much more acute when class sizes are too large. This result further agrees with the findings of Goodrum, Hackling and Rennie (2001) which showed a correlation between class

size and the quality of teaching and learning among schools in Australia. Again, findings of this study agree with Asiyai and Ajudeonu (2010) who reported that large class size has a lot of negative effects on teaching and learning quality in public secondary schools in Delta State, Nigeria. This has perhaps been responsible for the cases of examination malpractices, violence and barbaric characters among students in secondary schools.

On the issue of teachers' workload standards, there is a gap. Teachers' actual workload in the area of study was significantly different from the workload standards. This is corroborated by the findings of Nwinkina and Nwanekezi (2010) who found that the disparity in workload standards inhibited the academic performance of junior secondary schools (JSS) students in the federal capital territory, Abuja, Nigeria.

The result of data analysis also revealed that workload policy is not strictly adhered to. Some teachers are allocated less than the minimum teaching periods while others have more than the maximum. In the area of study, teachers taught 20 periods per week on the average which is considered moderate as indicated on table 3. However, there are teachers who taught 40 periods weekly, such teachers take more than one subjects, which requires additional planning of lesson notes, improvisation of instructional materials and marking of students' scripts. Unequal distribution of workload is a function of insufficient teaching staff strength (TSS), especially in core subject area like Mathematics, English Language and some science subjects like Biology, Physics as well as newly introduced subjects like Animal Husbandry and Civic Education. This is evident in table 7 on teachers' perception of teaching as time consuming (75.8%), data imputation also felt to be time consuming (62.5%), and marking of students' scripts seen to be stressful (76.7%).

The reason why the workload of private school teachers outnumbered that of public school is centered on the unavailability of capital or funds in providing necessary human and other learning resource (teachers, classrooms, and equipment). This often results in over-utilization of available resources in order to make profit at all cost. The quality of education is jeopardized; hence a higher workload in private schools is expected as found in this study. Most often than not, a private school teacher teaches about four school subjects and handles about six classes coupled with some administrative duties. With this in perspective, the academic performance of private schools is also doubtful because the excess workloads impede quality service delivery.

12. Conclusion

The issue of teachers' workload is hinged on the increasing demand for education and the inadequate number of teachers to carry the excess workload. It has been established through empirical findings that teachers' workload is an indicator in measuring teachers' instructional performance and students' academic performance. It is evident in the study that teachers are overwhelmed with excessive workload as school managers usually combine classes thereby having class size of over 60 as against 40 students per class, which negates the national teacher workload standards. This has perhaps been responsible for the poor implementation of curriculum and low academic performance of students in secondary schools.

13. Recommendations

Based on the findings of the researcher, the following recommendations were made.

- i. The government and other proprietors should employ adequate number of qualified teachers to improve the quality of teaching-learning process in secondary schools.
- ii. Principals should review workload distribution on a periodic basis to ensure equitable distribution of tasks to teachers and shed off unnecessary duties from teachers' workload.
- iii. Teachers who teach core subjects such as Mathematics and English Language or perhaps any subject that has a few number of teaching staff should be relieved of administrative tasks. In addition, the coverage of topics may be shared among the available teachers in related subjects so that no teacher is overloaded unnecessarily.
- iv. Government and other proprietors should provide adequate learning facilities and maximize the use of information and communication technology in large classes to reduce teachers' workload.
- v. Data entry clerks should be employed in secondary schools that will be responsible in inputting data and analyzing terminal scores in order to shed off burden on teachers.
- vi. Operators of private schools should consider the carrying capacity of their schools in making decisions on increasing enrolments hence, they should be quality conscious.

References

- Asiyai, R. I. & Ajudeonu, H. (2010). Effects of school population and class size on the academic performance of secondary school students in Delta state, Nigeria. *Nigerian Journal of Educational Administration and Planning*, 1(10), 221- 231.

- Ayeni, A. J. & Afolabi, E.R.I. (2012). Teachers' instructional task performance and quality assurance of students' learning outcome in Nigerian secondary school, *International journal of research studies in educational technology*, 1(1)2243-7738.
- Easthope, C. & Easthope, G. (2000) intensification, extension and complexity of teachers' workload. *British Journal of Sociology of Education*, 21, 1, 43-58.
- Federal Republic of Nigeria (2013). *National policy on education*. Lagos: National Educational Research and Development Council.
- Federal Republic of Nigeria (1990). *Nigeria teachers' service manual*. Lagos: Federal Ministry of Education..
- Françoise, D. & Winterton, J. (2005). What Is Competence? *Human Resource Development International*, 8(1), 27-46. DOI: [10.1080/1367886042000338227](https://doi.org/10.1080/1367886042000338227)
- Goodrum, G., Hackling, B. & Rennie, S. (2001). *The status and quality of teaching and learning of science in Australian school*. Canberra: Department of Education, Training and Youth Affairs, Commonwealth of Australia.
- Grenata, (2014). Teacher stress and disengagement impacts on students' performance, *Education world*. Retrieved June 7 2015, from http://www.educationworld.com/a_curr/teacher-stress-impacts-student-performance.shtml
- Halim, L. M., Diane, R., Catherine, T. & Shrouf, P. E. (2012). Rigidity in Gender-Typed Behaviors in Early Childhood: A Longitudinal Study of Ethnic Minority Children. *Child Development*, 0(40), 1-16.
- Kolawole, S. K. (1982). Impact of class size on student's achievement in secondary schools in Ibadan. Unpublished M.Ed. Thesis, University of Ibadan.
- Ksenia, Z. (2012). *Taking the strain: The impact of musculoskeletal disorders on work and home life*. Retrieved from <http://www.vra-uk.org/node>
- Marina, Z. (2012). Job factors related to musculoskeletal symptoms among nursing personnel. *A Review*, 41, 2516-2520.
- Mbugua, Z. K., Muthaa, G. M., Kibet, K. G., & Nkonke, G. R. (2012). Factors contributing to students' poor performance in Mathematics at Kenya certificate of secondary education in Kenya: A case of Baringo County, Kenya. *American International Journal of Contemporary Research*, 2(6), 10-17.
- Naylor, C. & Malcomson, J. D. (2001). A study of workload of English teachers in B.C. secondary grades. BCTR research report. RTO 1-0036 16-17.
- Nwikina, L. & Nwanekezi, A. (2010). Management of job-related teacher burnout in Nigerian schools. *Academic Arena*, 2(7), 23-34.
- Ofoegbu, F. I. (2004). Teacher Motivation: A Factor for classroom effectiveness and school improvement in Nigeria. Gale Group. Retrieved from <http://www.findArticles.com>
- Olaoye, A. A. (2012). Preparation and availability of NCE mathematics teachers in Nigerian teacher education. Book of proceedings of the national conference organized by Faculty of Education, University of Abuja, Nigeria.
- Osim, R. O. (2009). School quality, principals' administrative characteristics and secondary school teachers' task performance in Cross River State. Nigeria. Unpublished Ph.D thesis, Faculty of Education, University of Calabar.
- Razmjou, S. (1996). Mental workload in heat: Toward a framework for analyses of stress states. *Aviation, Space, and Environmental Medicine*, 67(6), 530-538.
- Staal, M. A. (2004). *Stress, cognition, and human performance: A literature review and conceptual framework*, Ames Research Center, Moffett Field, California.
- Sultana, B., Bano, Y., Bano, F. & Shafa, M. D. (2012). The nature and impact of teacher stress in the private schools of Gilgit-Baltistan, Pakistan. *International Journal of Academic Research in Progressive Education and Development*, 1(2), 64-84.
- Ukeje, B. O. (1992). *Educational Administration*. Enugu: Fourth Dimension Publishing Company Ltd.
- Vroom, V. H. (1964). *Work and motivation*. Oxford, England: Wiley
- Wosyanju, M. G. (2005). *Assessment of large classes*. A paper presented at the 31st annual conference of international association for educational assessment, Abuja, September 4th -9th.

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).