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### Teacher Quality Management Strategies and Students' Academic Performance in Lagos State Education Districts

Gbenu, J. P.

Lagos State University, Faculty of Education, Department of Educational Management, OJO, Nigeria \*Corresponding Author's Email: <u>piusjide@gmail.com</u>

Abstract: Teacher quality management strategies, used synonymously with teacher quality planning structures in this study, refer to measures put in place by teachers, principals and Tutors-General/Permanent Secretaries to improve teacher quality. Thus, the study has the purpose of establishing the extent to which each of the Education Districts in Lagos State contributed towards quality education (through teacher quality and management strategies between 2008-2010). With the study's foundation anchored on correlational and descriptive research designs, its population was the 6 Tutors-General/Permanent Secretaries in Lagos State, the 9.796 teachers and the 333 principals of the senior secondary schools as at 2010. The sample sizes were 6 Tutors-General/Permanent Secretaries, 97 principals and 2,391 teachers after stratifying into districts and selected through the simple random technique. Four instruments were used to collect data. These included 'District Teacher Quality Management Strategies Questionnaire (DTQMSQ)' - r=0.91, School Teacher Quality Management Strategies Questionnaire (STQMSQ)' - r=0.89, 'Teacher Quality Management Questionnaire' (TQMQ) - r=0.87 and WASSCE results. Analysis was carried out using ANOVA and regression model. Findings indicated that no significant difference was found in teacher quality management strategies among the six Education Districts in Lagos State; and a significant (inverse) relationship existed between academic performance and improved teacher quality in the six Education Districts of Lagos State. Based on these findings, some recommendations were made among which are that the minimum standard of first degree (education) into the teaching profession should be maintained; the establishment of teacher quality planning structures for teachers; every District should establish education resource centres for teachers; and that the Education Districts and state government should assist teachers, not only in the area of computer training and ICT generally, but also in the area of computer provision at a subsidized rate, if it cannot be given out free.

Keywords: teacher quality, teacher quality management strategies/planning structures, academic performance, WASSCE

### INTRODUCTION

Teaching has often been described as the oldest and noblest of all professions. The engineers, lawyers, pharmacists, medical doctors and others are made by the teacher. It can be inferred therefore that the teacher is the most important manpower needed to develop other manpower in any society. Kolawole [1], who describes the teacher as "an indispensable catalyst who translates the schemes, aims and objectives of education into concrete action through teaching the pupils/students in a classroom", also asserts that a teacher ensures that he/she "employs varied and suitable methods in imparting new knowledge, skills, discipline and attitudes designed for the consumption of his/her audience".

It is in line with maintaining high teacher quality that made the Federal Government of Nigeria establish the Teachers Registration Council of Nigeria by the TRCN ACT 31 of 1993 as contained in the working document of the Council. According to the Teachers Registration Council [2] the Vision of the Council is to ensure "an effectively regulated teaching profession in Nigeria founded upon robust teacher education and practice and where teacher quality, discipline, professionalism, reward and dignity match international standards".

It must be emphasized therefore that there is a great need for a sound specialised background and professional training for teachers. An unqualified teacher who delivers poor quality teaching is an enemy to the students' progress and a danger to the child's upbringing. For a non-professional to handle any subject in school is a very delicate problem because it concerns the intellectual, moral and emotional phases of the child's life [3].

Considering the fact that teacher quality is a paramount variable in terms of determining students' achievement in schools, it is imperative to sustain, maintain and improve teacher quality through adequate management strategies.

#### The Hot Issue

The teacher has often been blamed for poor academic performance and gross indiscipline on the part of the students even when the total moulding of students' lives does not rest entirely with the teacher. The 2009 National Examination Council Senior Secondary School result recorded 6 percent credit pass for students in five subjects including English and Mathematics, an outcome which was painted gloomily generally nationwide. Although many factors were mentioned as possibilities, the most mentioned was the quality of the teachers. In 2006, the Universal Basic Education (UBE) identified 46 percent of the available 600,000 teachers meant for the programme in Nigeria as unqualified because they did not possess the minimum teaching qualification of NCE. A number of issues arise from these amongst which are high level importances of teacher quality and management programmes meant to improve teacher quality. Thus, if the quality of teachers is poor generally as being observed in some quarters in Nigeria, what steps are being taken, or can be taken to improve this standard even while on the job particularly with reference to Lagos state? What are schools and district heads in Lagos State educational system doing to improve the quality of teachers in their schools and their districts particularly now that the districts enjoy some degree of autonomy? Are they aware of the need to improve the quality of teachers in their districts for the purpose of performance? improved academic Are there management strategies in place for these purposes of teacher quality and its improvements? These are issues of major concern to the study.

## Improving Teacher Quality: Some Management Strategies Identified

A number of programmes have been instituted to improve teacher quality which varies according to countries. For instance, to meet the challenge of placing a highly qualified teacher in every classroom, some states in the United States are strengthening their traditional teacher-preparation programmes and developing systems to hold those programmes accountable. Such programmes often come under fire for curricula marked by a lack of rigour and researchbased instruction [4]. Crane [5] reports that the federal government of the United States "currently requires states to report the pass rates on teacher licensing examinations for all their teacher education institutions", a way of sustaining quality among teachers.

Additionally, attempts at reforming teacher education in America have produced a number of other programmes. Thus, many schools, according to Crane [5] "have introduced induction and mentoring programmes to address high attrition rates and improve the practice of their inexperienced teachers". Fifteen states require and finance mentoring programmes for all new teachers. Other states and districts are attempting to raise teacher salaries and improve working conditions in an effort to curb early departures.

In South Dakota, teacher quality has received a number of programmes to improve its state. According to the Department of Education Teaching Agency [6] the 'Improving Teacher Quality Programme' initiated makes funds available to State Educational Agencies (SEAs), Local Educational Agencies (LEAs) and State Agencies for Higher Education (SAHE) to support and help shape state and local activities that aim to improve teacher quality and increase the number of highly qualified teachers and principals.

The programme focuses on using practices grounded in scientifically-based research to prepare, train and recruit high-quality teachers. The new programme also gives states and districts flexibility to select the strategies that best meet their particular needs. The goal is to improve teaching so as to raise student achievement in the academic subjects.

In Nigeria, there have been series of calls for teacher quality management programmes to improve teacher quality as evident in various assertions. For instance, Olaniyonu [7] states that "the present day teacher needs more than educational qualifications. He faces greater challenges than the teachers of yester years. He thus needs to update his knowledge from time to time because of his complex roles". Ijaiya [8] suggests the adoption of "school-based Total Quality Management (TQM)" in schools as a preventive measure against failure and wastage which could come about as a result of improved training of teachers and principals. The philosophy behind TQM, in her words, "is to develop the culture of continuous improvement through employees". School inspection which has been the traditional form of examining teachers' activities and ensuring effectiveness, in the words of Olaniyonu [7] "is inadequate in assisting classroom teachers to improve their performance". Teacher quality is indeed a priority area in education policy.

It also in line with the focus of producing quality teachers that made the Federal Government of Nigeria in 2006 establish a Ministerial Task Team called the Teacher Quality Task Team and charged with the responsibility of developing ideas and document that could boost teacher quality in Nigeria as reported by the Teachers Registration Council of Nigeria [2] and since then, the Task Team has been very effective in maintaining quality among Nigerian teachers. According to the Council, "inability of a teacher to meet the Professional Standards will injure the pride, integrity and quality of the teaching profession in Nigeria and must be addressed."

# Recognising Teacher Quality: Legal backing by the Lagos State Government

In Lagos state, the Teachers' Establishment and Pensions Office were created in March 2005 following the reform of the education sector which, according to the Lagos State Government [9] "metamorphosed from the post Primary Teaching Service Commission (PP-TESCOM) derived from section 14, Education Reform Law 2005". Accordingly, for effective management of the post-primary school system in Lagos state, the Reform Law states that the Head of service through the Teachers' Establishment and Pensions Office (TEPO) gives guidelines on all establishment and training matters concerning all the teaching and non-teaching staff within the Districts in conformity with the other service.

Teachers' Establishment and Pensions Office (TEPO) has the responsibility for the training of the teaching staff on Grade level 13 and above as stated by the Lagos State Government [9]. This is to ensure standardization and uniformity so that the scarce resources are judiciously utilized as explained by the Government.

# Some Teacher Quality Management Strategies adopted by Schools and the Lagos State Government

Several trainings had been carried out by the Fashola administration, the State Governor. Specifically in 2010, TEPO, in conjunction with Open Arms Limited organized a 5-week training programme themed 'revamping subject content knowledge, teaching methodology and leadership skills for Lagos state teachers'. This was one of the series of such training mounted by the administration for teachers in the State.

Improving teacher quality at all levels is of serious concern to any government. In Lagos state, the need to avoid redundancy has been given as one of the reasons for the training of teachers in the State according to Ogunlewe [10] who also maintains that "the State wants to drive every facet of the administration towards excellence, especially the education sector".

In an attempt to update teachers' skill in the areas of Information and Communication Technology in Lagos State, Chibuike [12] reports that Microsoft, through its partners, "have completed the first phase of the pilot training programme for teachers in one of the three selected secondary schools in Lagos". As explained, the training programme provides teachers with ICT education, as well as tools needed to effectively train students on IT using Microsoft technologies. There is no gainsaying the fact that there has been a steady decline in the standard of education in the country. This is even more so when it is realized that the rest of the world has left the nation behind in embracing digital education, especially among instructors or teachers. Technology has been embraced by many countries, not just as a course but a tool for teaching all the courses or subjects [12].

The pilot training programme, under the auspices of the Microsoft IT Academy, had 43 teachers drawn from Agidingbi Secondary School as participants. The Microsoft Academy programme enables schools offer a world-class IT curriculum to students utilizing the latest Microsoft technologies while learning about the Information Technology. The programme also aims to link academic learning to job skills, thus allowing students to graduate with the IT skills that they would need to advance in their future careers with minimal adjustment in the working world. At the end of the programme, students were given Microsoft technologies certifications.

In line with the Microsoft Academy training programme, Sosan [13] adds that the Lagos State Government is "poised to create change in education. We are determined to provide a conducive learning environment and build young men and women with knowledge and skills that will make them economically productive and self-reliant". Currently, there is a training programme going on in the state called "Ekoo Project" meant to improve teachers' skills on methods of teaching difficult topics in selected subjects.

Schools are also adopting strategies to improve teacher quality such as lesson supervisions by heads of department and mentoring.

### METHODOLOGY

Two designs were found suitable for the study: correlational and descriptive. This is because on the one part, the study examined the nature of relationship between improved teacher quality through management strategies and students' performance in each of the six Education Districts in Lagos State. On the other hand, the study attempted a description of the existing situation regarding state of teacher quality and management strategies designed to improve the quality of teachers in the state through the Education Districts.

The study population was made up of the 6 heads (Tutors-General/Permanent Secretaries) in the six Education Districts of Lagos State, all the 333 principals of senior secondary schools and all the 9,796 senior secondary school teachers in the State. The sample sizes were as follows: the 6 Tutors General, 2,938 teachers and 97 principals selected through the simple random technique. Four instruments were used for the study. Three were developed by the researcher in conjunction with experts in measurement and evaluation and the last was the test instrument, called the West African Senior Secondary Certificate Examination (WASCE), and developed by West African Examination Council (WAEC). These instruments were tagged (a) 'District Teacher Quality Management Strategies Questionnaire' (DTQMS) for Tutors-General, (b) 'School Teacher Quality Management Strategies Questionnaire' for principals (STQMS), and (c) 'Teacher Quality Management Strategies Questionnaire (TQMS)' for teachers.

DTQMS has three sections: A, B and C. Section A contains items on personal information of the respondents who in this case are the Tutors-Generals/Permanent Secretaries. Information that are included in section A are district nomenclature, sex of head, highest educational qualification, position (or level) and experience of the respondents on the job which they responded to, by ticking or supplying, as applicable. Section B, designed along the Likert scale format, has thirteen items that centered on teacher quality management strategies and the options of Very True, True, Untrue and Very Untrue. Section C requires each Tutor-General to respond openly on other measures adopted by their District meant to improve teacher quality not covered by Section B.

STQMS was meant to be responded to by principals of the schools selected for the study. Similarly, it contains three sections namely: A, B and C. Section A contains items on personal information such as district nomenclature, principal's sex, highest educational qualification, grade level and experience. In Section B, there are six items which centered on teacher quality management strategies put in place by the school and are on the Likert Scale format with the options of Very True, True, Untrue and Very Untrue. Section C also requires principals of schools to respond freely on measures adopted by their schools to assist the teacher in improving his quality which are not covered by Section B.

TQMS has three sections also: A, B and C to be responded to by teachers. Section A contains personal information items such as district nomenclature, status, teacher's sex, highest educational qualification, subject(s) taught, grade level and experience as teachers. Section B, of the Likert Scale, contains twenty-eight items which centered on the quality of teachers and similarly to be responded to on the options of Very True, True, Untrue and Very Untrue. The items were created under the following headings: computer literacy and efficiency at work, library services/facilities, supervision, and education resource services which are factors surrounding the quality of teachers. Section C expects the teachers to supply information on the number of times they attended any academic exercise in the form of training per term or session.

To represent students' academic performance, five credited subjects including English and Mathematics were used as a yardstick. In terms of scoring, all positively worded items for all Likert-type of instruments were scored in this order: Very True (VT) - 4; True (T) - 3; Untrue (U) - 2 and Very Untrue (VU) - 1. The reverse was the case for negatively worded items.

The number of workshops/seminars/trainings' attendance were rated as shown in Table 1.

## Table 1: Weights attached to Teachers' Workshops/Seminars/Trainings Attendance

No. of times	Weights
1 – 3	3
4 - 6	6
7 & above	7

Hypothesis 1

H<sub>0</sub>: There is no significant difference in the teacher quality management strategies existing among the six Educational Districts of Lagos state between 2008-2010

	Teacher Quality Management Strategies					
Schools	1	2	3	4	5	6
1	60.45	56.78	76.98	76.91	45.87	90.23
2	89.9	87.45	45.56	56.68	68.88	86.35
3	65.87	34.47	32.45	43.87	56.65	43.21
4	50	67	78.76	76.21	87.55	67.45
5	88.81	79	78.34	89.23	65.77	78.82
6	70.23	58.09	47	92.21	65.45	73.21
7	56.09	36.66	87.43	68.43	34.56	57.68
8	52.12	89.91	23.45	56.76	45.21	88.23
9	65.41	32.34	78.43	34.52	57.38	45.34
10	37.02	43.35	33.54	65.21	65.21	58.5
11		47.68	98.21	44.32	33.49	78.9
12			67.88	76.47	78.33	93.21
13			34.87	66.43	61.45	57.88
14			88.21	45.67	32.23	65.98
15			67.98	65.45	43.61	61.45
16	NA	NA	87.88	87.21	44.57	35.56
17			72.34	76.22	67.21	79.23
18			84.73	51.98	60	88.21
19			NA	NA	33.65	91.21
20					39.13	47.94

## Table 2: Valued Teacher Quality Management Strategies among the six Education Districts (in %) in Lagos State for each of the Schools

#### NA: not applicable Table 2 shows the responses from each of the schools as attested to by teachers, principals and tutors-

general (in %) on management strategies introduced to improve teacher quality.

# Table 3: Summary of ANOVA of the Significant Difference in Teacher Quality Management Strategies among the six Education Districts

Source of variation	Degree of freedom	Sum of squares	Mean squares	Significance level	$F_{\rm cal}$	F <sub>tab</sub>	Decision
Treatments (between							
groups)	5	2896.97	579.39				
Error (within groups)				0.05	1.66	2.37	Accept H <sub>0</sub>
	91	31865.80	350.17				
Total	96	3476.77					

The acceptance of the Null hypothesis here shows that there is no significant difference among the six Education Districts in Lagos state in terms of teacher quality management strategies evidenced by  $F_{cal}$  <  $F_{tab}$  at the degree of freedom of (5,91).

Hypothesis 2

There is no significant relationship between senior secondary school students' academic performance and improved teacher quality through management strategies for the Education Districts aggregately in Lagos state between 2008–2010

# Table 4: Mean Cumulated Academic Performance (5 credits including English and Mathematics) in Lagos StateEducation Districts (in %) from 2008 – 2010

	Academic Sessions			Mean	Position
Districts	2008	2009	2010	cumulated performance	
1	14.31	23.95	5.61	14.62	2nd
2	6.92	12.96	6.95	8.94	4th
3	13.97	40.74	26.04	26.92	1st
4	6.94	12.15	5.56	8.22	5th
5	7.30	9.88	5.09	7.43	6th
6	9.73	14.90	6.44	10.36	3rd

Table 4 shows the mean cumulated academic performance (5 credits including English and Mathematics) in Lagos State Education Districts with District 3 coming first in the aggregated academic performance from 2008 - 2010 and District 5 coming sixth.

The difference in academic performance is also represented by the bloated pie-chart of Fig. 1.



Fig. 1: Mean Cumulated Academic Performance (5 credits including English and Mathematics) in Lagos State Education Districts

## Table 5: Weighted Mean Teacher Quality Planning Structures (Management Strategies) for Districts by Teachers, Principals and Tutors-General (in %)

District	Mean weighted planning structures	Position
1	63.69	4th
2	57.52	5th
3	65.95	2nd
4	65.43	3rd
5	54.31	6th
6	69.43	1 st

Table 5 shows the mean weighted teacher quality planning structures (management strategies) as rated by the teachers, principals of schools and Tutors-General of the Districts, supported by Fig. 2. Teacher quality planning structures or management strategies were made up of items that centred on availability of resource centres within the Districts, accessibility of funds for training, the ease with which teachers' applications are granted for personal improvements,

sensitization by schools and Districts on further trainings by teachers, among others. District 6 came first in this regard while District 5 came last. By implication, there are teacher quality planning structures or management strategies in these districts as attested to by Table 5. Fig. 2 shows the cumulative effects of the teachers', Tutors'-General and principals' ratings as far as teacher quality planning structures or management strategies are concerned.



Fig. 2: Weighted Mean Teacher Quality Planning Structures (Management Strategies) for Districts by Teachers, Principals (Schools) and Tutors-General (District) (in %)

 Table 6: Summary of the Regression Equation (Parameters) of Academic Performance (Y) and Improved Teacher

 Quality (X) in Lagos State

Parameters	Coefficients	Dependent variable	<b>Regression equation</b>
Constant	49.01		
Improved teacher	-0.067	Academic performance (Y)	Y = 49.01 - 0.067X
quality (X)			

By the regression parameters, an inverse relationship existed among senior secondary school students' academic performance and improved teacher quality through management strategies in Lagos state Education Districts aggregately. The general implication of this is, as academic performance declines, the explanatory parameter of improved teacher quality improves and vice-versa. Specifically however, from the data collected, it is observed that on the average, per district, it was academic performance that declined indicating that improved teacher quality (through trainings, seminars, workshops, and so on) increased, though its influence on academic performance is less than 1%. Thus, it could be deduced that there might be need to concentrate heavily on ways of improving teacher quality.

#### DISCUSSION

A major concern to any government should be good academic performance irrespective of the type of government, its structure and policies. It is the concern for students' high academic performance that makes Darling-Hammond [13] asserts that "improving the quality of teachers will do more for students who are most educationally at risk". Equally too, Bacchus [14] maintains that quality of education means "raising the level of academic performance of students, usually as measured by test scores, in the various subjects, which form part of their school curriculum". In the same vein, a valuable index for measuring the success of education qualitatively is the students' academic achievement [15].

Conclusion drawn from hypothesis 1 shows no significant difference in the teacher quality management strategies put in place by secondary schools (as represented by information from the teachers and principals) and Districts (as represented by information from the Tutors-General). This is so because the Lagos state government was highly responsible in encouraging and putting up teacher quality management strategies as centrally done through the training activities of the Lagos State Teachers Establishment and Pensions Office (TEPO) more than schools and Districts.

### CONCLUSION

Nigeria generally and Lagos State in particular need to work towards a society: in which a child's chances of success are not related to his or her socioeconomic background, gender or ethnicity; where education services are designed around the needs of each child, with the expectation that all learners achieve high standards; where all children and young people leave school with functional skills, understanding how to learn, think creatively, take risks and handle change; where teachers use their skills and knowledge to engage children and young people as partners in learning; and where teachers, acting quickly, adjust their teaching styles in response to pupils' learning. These look herculean especially as they confront teachers who are at the centre of the up-hill task. The quality of the teacher, from various studies surveyed, is the most important variable that determines the quality of the students. The challenges confronting the teachers are surmountable provided these teachers can go through the necessary training constantly, as well as, government responding to teachers' needs through the mounting of appropriate teacher quality planning structures aimed at improving their qualities as recommended by the study. By personalising learning and teaching, made possible through high quality teachers in this way, it is hoped that the declining and dwindling academic performance of students at WASSCE and NECO levels will soon be a thing of the past in Lagos State.

### RECOMMENDATIONS

Based on the findings of the study, it is expedient to recommend the following.

1. With respect to the enhancement of teacher quality, the minimum standard of first degree (education) into the teaching profession at the senior secondary school level should be maintained.

- 2. As a way of achieving continuous improvement in service delivery, a structure should be established for teachers to engage in further training as many empirical studies found a positive relationship between teacher improvements and students' academic performance. Such structures as 'teacher training fund', constant seminars and workshops attendance, continuous supervision and guidance of teachers, induction and mentoring programmes for newly recruited teachers, among others deserve consideration.
- 3. The country should work with International Educational Organizations like UNESCO in terms of assistance to analyze teacher quality and implementing policies and strategies to increase the number of qualified teachers and professionalize the under-qualified teachers on the job
- 4. Every District should establish education resource centre where teachers can make consultations in terms of getting educational materials and assistance that their schools cannot provide
- 5. There is need to emphasize computer literacy among teachers more so that it was found out some teachers, through the instruments, could not use the computer at all, and those that could use did not have access to internet facilities and their laptops in particular were bought by themselves. Education Districts and the state government should assist teachers, not only in the area of computer training and ICT generally, but also in the area of computer provision at a subsidized rate, if it cannot be given out free.

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