# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

# Impact of Principal Leadership Styles and Teacher Quality on Teacher Productivity

#### John Olakitan Odunlami

Ph.D Scholar, School of Business Management, Universiti Utara Malaysia, Malaysia **Dr. Hassan Ali** 

Professor, School of Business Management, Universiti Utara Malaysia, Malaysia **Dr. Shahibudin bin Ishak** 

Senior Lecturer, School of Business Management, Universiti Utara Malaysia, Malaysia

#### Abstract:

The aim of this study is to predict teacher productivity from principal leadership styles and teacher quality using social learning and full range leadership theories as the foundation. This is a relationship research that used both correlational and regression design. The study involved 344 participants made up of 305 teachers and 39 vice principals from 39 secondary schools in Lagos state, southwest, Nigeria, through systematic random sampling. The research instruments were the MLQ-6S for teachers' ratings of their perception of principal leadership styles on a 5 scale Likert behavior scale of 1= never, 2=rarely 3=sometimes, 4= frequent and 5= always; teacher quality assessment questionnaire TQAQ and teacher productivity questionnaire TPQ that were both rated by the vice principals on a scale of level of agreement or disagreement in which 1= strongly disagree, 2=disagree, 3=neutral, 4=agree and 5= strongly agree. Data collected from responses to questionnaires were entered into the SPSS software first to clean up the data and also to ensure it complied with the requirements of multivariate analysis. Next was exploratory factor analysis for data reduction and to establish construct validity of the research instruments. The results of the factor analysis returned the factorability of all study variables and the scale of measurement of research instruments showed acceptable alpha coefficient of reliability ( $\alpha$ ) ranging from .594 to .924. Thereafter, correlation analysis was undertaken, followed later by multiple regression. Correlation returned a verdict of strong and positive relationship between each of transactional leadership styles and teacher productivity (r=.488, p=.000) and a low and negative correlation between teacher quality and teacher productivity (r=.186, p=.000, The results of multiple regression indicated that transformational leadership TFL ( $\beta=-.118$ , t=-2.111 p=.036) is significantly related to teacher productivity only at 95% significant level and not at 99% significant level. But transactional leadership TSL ( $\beta$  = .524, t=8.288, p=.000) significantly predicted teacher productivity in a positive manner at both 95% and 99% significant level. However, teacher quality TQ ( $\beta$  =048, t=-.758, p= .449) is not significantly related to teacher productivity in a positive manner. The implications of the findings of this research is that transactional leadership style better predicts teacher productivity than transformational leadership style and that teacher quality doesn't translate automatically into teacher productivity. This confirms that there is need for school principals to monitor instruction supervision to ensure quality teaching and learning, because it is classroom practice of a teacher that matters. One thing is for a teacher to have the required knowledge, it is another for him to effectively pass it on to the pupils to the extent of making them achieve academic success as he/she provides evidence of teaching productiveness.

Keywords: Transformational leadership, transactional leadership, teacher quality and teacher productivity

#### 1. Introduction

According to Mustapha (2008) education is a process of passing on the culture of a people from one generation to another. This process brings about a permanent change in the manner of behaviour of citizens, members of a nation or community. Hence through teaching and learning individuals personally benefit in a way peculiar to that individual before the society can also derive some benefits. But that is not the only view on education as Ajayi and Afolabi (2012), considered education as the use of cognitive, affective, psychomotor and psycho - productive domains to change human behaviour in conformity with a set standard, or in other words to train the individual to accept and imbibe certain virtues, skills or expertise while simultaneously rejecting a commonly agreed societal aberration. In the process of accomplishing this task, education becomes a process that provides the vital link between the present, the past and then the future.

Such is the relevance of education to all nations of the world, including Nigeria. At independence in 1960, the Nigerian education system tagged 6-5-4 involved six years of primary school, five years of secondary school and four years of tertiary education. This metamorphosed to the present 6-3-3-4 system that is characterized by six years of primary school, three years of junior secondary school, three years of senior secondary school and four years of tertiary level of education (National Policy on Education, 2004). With the coming on stream of the Universal Basic Education (UBE), the six

years of primary school was combined with the three years of junior secondary school to form the nine (9) years of basic education.

The Nigerian educational goals are to inculcate good values, sense of nationalism and national integration, the attainment of self-realization of the individual, better human relationship by way of respect for others, developing in the Nigerian child national consciousness, national unity and equally ensuring all round progress of the nation. But as Fabunmi (1986) succinctly puts it, these goals particularly those of the 6-3-3-4 educational system are far from being achieved as the secondary education sub sector is a shadow of itself, being in a state of near-collapse.

Akporehe (2011) attributed this pathetic state of secondary schools in Nigeria as the consequence of the neglect of public education institutions in Nigeria in the past years, a problem that is visible for all to see, across the nation. Due to this neglect, there is evidence of sharp decline in the quality of public secondary education evidenced by low teacher quality in recent times, as is reported in literature (Sistus, 2008; Akporehe, 2011; Borisade, 2013; Uko, 2015;). In addition to this (Abdulkareem, 2011; Onyeike &Vinari, 2013) agreed that near- absence of science infrastructure like standard laboratories in most Nigerian secondary schools is responsible for poor student performances in science practical examinations. Even though provision of funds is crucial in education for the procurement of the needed equipment in schools and in the course of overall implementation of educational policies, educational funding is inadequate in Nigeria (Adeyemi, 2011; Peter & Isaac, 2013; Sofoluwe, 2012).

Besides shortage of funds, presenting itself in inadequate infrastructural facilities, other problematic issues which have been under-researched are the leadership styles of principals in public secondary schools and the quality of the teachers. Teachers are crucial in any educational system, being the centre-point in making sure educational plans come into reality. Thus, they are regarded as one of the greatest inputs into the educational system albeit seen by many as solely responsible for low student achievement that translate into low standard of education (Ibukun, 2009; Sass, Hannaway, Xu, Figlio, & Feng, 2010). Ibukun (2009) in particular argued further that the Nigerian secondary school teachers of today are not as committed to their teaching service as their predecessors were. And without dispute, a qualitative and competent teacher will produce equally qualitative students' performance. On his own part, Nwokeoma (2010) while giving reasons for low quality of teachers as responsible for students' low performance noted that teachers' welfare, particularly their remunerations are not fair enough in terms of the service they render, insisting that majority of them are underpaid. Furthermore, other factors contribute to teachers' low quality and productivity. In a study on supervision-essentials to

productivity Omisore (2014) identified several factors that determine teacher productivity. These include morale, comfort level, the right training and tools, teacher supervision, validation, having a voice in decision making, team work, work-life balance and compensation. Other studies on teacher productivity focused on a few factors such as gender role, teacher workload, institutional policies, reward system, and personal factors (Adu, Titilola& Eze, 2012, 2013; Adu, 2015).

However, extant literature indicates that the impact of principal leadership style on teacher's productivity has been neglected. The present study is of the view that the leadership of the various public secondary schools in Nigeria have a role to play towards improved teacher productivity which hopefully translate into high student achievement (Arikewuyo 2009; Arikewuyo & Adegbesan 2009).

In summary, the literature provided the researchers a litany of factors or determinants of teacher's productivity that proved beneficial as dimensions of teacher productivity. From past relationship studies, it could be observed that researches tend to use either teacher related, school-based factors of teacher productivity like experience, training, teacher's workloads or non-teacher related but school-based teacher factors of teacher productivity such as principal leadership effects on teachers, and externally prompted teacher productivity factors like school environment, reward system etc. Only few past studies used a combination of teacher related and non-teacher related school-based factors of teacher productivity as independent variables in one study. This present study filled this literature gap by considering teacher quality as teacher related factor and principal leadership styles as non-teacher related factor in predicting productivity of secondary school teachers.

#### 2. Literature Review

# 2.1. Teacher Productivity

The Business Terms Glossary (2014) defined productivity as the measured output of an employee within a specified period of time. It can be explained as 'the ratio between output and the sum of factors required to achieve it,' (Owizy, 2013: Saari, 2005; 2006). And in practical term, Yesufu, (2000), looked at productivity as the efficient (doing things, the right way) and the effectiveness (doing the right things) use of resources, in production and services.

Onwuachu (2007) considers teacher productivity as a dedicated conduct of a teacher in the discharge of their duties. He went further to list the role functions of a teacher to include: regular preparation of lesson notes, maintaining orderly classroom, using cooperative learning techniques, participating in teamwork in teaching methods, managing students, evaluating learning outcomes, attendance and making contribution at staff meetings as well as active participation in the Parent Teachers Association activities. To sum it up, teacher productivity is the totality of efforts a teacher put into the teaching assignments in relation to the resources available to the teacher (Bernolak, (2009).

According to Adeniji (cited in Akiri and Ugborugbo (2008), teacher productivity impacts more on student learning, than any other education program or policy does. The reason is not far-fetched: teachers are major contributor in preparing young people to lead successful and productive lives.

Studies on teacher productivity can be classified into two main groups of determinants or factors of teacher productivity and relationship studies involving teacher productivity. The latter being more in number than the former. Relationship studies are also of two types: one group involved only one independent variable in the study while the other involved two

or more independent variables in one single study. CATME (2001) and Manjunath, Tyagarajan, Vasant & Ansari, (2008) pioneered the studies on what constitutes the determinants of teacher productivity, but it was Manjunath et al., (2008) that grouped them into personal antecedent variables, socio-psychological factors and organizational factors. In a related development, Omisore (2014) identified several factors that determine teacher productivity but did not group them. His list of productivity factors includes morale, comfort level, the right training and tools, teacher supervision, working environment, being a part of decision making, team work, work-life balance and compensation. The next series of researches on determinants of teacher productivity focused on few factors, but went beyond a mere listing of the factors, by stating their impact on the productivity of teachers. These group of studies included that of Adu, Titilola, & Eze-Ifeoma (2013) on teachers' workload and gender as determinants of teacher productivity and of Adu (2015), which considered the role played by institutional factors, personal and reward system in the determination of teacher productivity.

However, the researches on relationship involving productivity were by far more than those on its determinants. In most of these relationship studies, the independent variables were diverse while all maintain teacher productivity as the dependent variable. For instance, Otieno (1997) used teacher role-load as the independent variable. Teacher experience caught the attention of Clotfelter, Ladd. & Vigdor (2007) and Sass (2007). The trio of Adeogun (2006), Osagie (2011) and EzeThela (2016) considered teachers' training also called professional development as the independent variable in their researches on teacher productivity. There were other studies of note on school leadership influence on teacher productivity such as Branch, Hanushek & Rivkin (2012) in the USA, Besong (2014) in Cameroon on principal leadership effectiveness and principal leadership on teacher productivity by Shamaki (2015) in Nigeria.

The environment in which teachers are operating also caught the attention of researchers like Akpohere (2011) who examined the relationship between school environment and teacher productivity in Nigerian secondary schools while Leblelosa (2012) paired workplace quality with employee productivity in USA. The two variable relationships between teacher quality and teacher productivity in selected secondary schools in Kenya by Ndugu (2014) is relevant to this study. On the contrary, there are very few relationship studies involving teacher productivity with two or more independent variables. In fact, only two of such were found in the Literature. Specifically, Ahiaba (2002) and Adeogun (2006) studied the combined effect of teacher training and teacher experience as the independent variables. These identified gaps in the literature reviewed, further prompted this research and they were filled in this study. Only few, if any earlier study used a combination of teacher related, school-based factor of productivity in teacher quality and non-teacher related school-based teacher productivity factors in principal leadership styles as independent variables, to bring to bear the influences of the two major dramatis personnel in the secondary school in explaining teacher productivity.

#### 2.2. Principal Leadership Styles

86

Principal leadership style is the consistent pattern of behaviours of a school principal (Barbuto, 2005; Kiboss & Jemiryott, (2014); the way and manner a principal provides direction, implements plans, and motivates people Clark (2000); and the particular behaviour applied by a principal on his subordinates (Ng 'ethe, Namasonge,& Mike, (2012)to influence group members and make decision toward achieving school goals. According to Chandan (1987), leadership style represents a range of behaviour a leader exhibits to succeed. Adeyemi (2006) posited that it involves those variables that point out the typical work of a leader in an organisational setting such as how he/she plans, structure tasks, control and maintain good work relationship with staff. The present study considered two major leadership styles in the full range leadership styles of Bass (1985): the transactional and the transformational leadership styles.

The principal's visible influence on school is explained by two major concerns: Firstly, principals as role model encourages the attitude, they prefer the staff of the school imbibe or imitate (Ali & Hale 2009). A high level of trust of the school principal by staff positively influences school productivity which enables teachers to concentrate their full energy toward the achievement of school goal(s). Secondly, principals by their choice of leadership style inadvertently decide on the atmosphere they wish to create in their schools; either opting for production focused or task-orientation, using the transactional leadership style on one other hand, or people –focused, that is, relationship oriented using transformational leadership style, on the other.

Transformational leadership style is a type of leadership which Yukl (2000) described as "the process of influencing major changes in the attitudes and assumptions of organizational members and building commitment for the organization's mission, objectives and strategies" Transformational leaders motivate and inspire their followers by making them realize a change, review their work and brace up to what it now requires. Workers are encouraged to relate to and cooperate with each other's, work with zeal and be confident in them to be able to and so work to bring the shared vision. into reality. This positive feeling of the leader for the workers, produce a reciprocal admiration, respect reliance, and confidence of the followers for their leader and they seek to do more for his sake than he demanded of them (Avolio, 1999; Bass, 1985, 1998; Yukl, 1998).

Thus, the principal practicing transformational leadership enhances the motivation, morale, and job performance of teachers through a variety of mechanisms, which include connecting the teacher's sense of identity and self to a project and to the collective identity of the school. The transformational principal as a role model for teachers, inspires them to raise their commitment towards increased productivity (Joyce & Judge 2004).

According to Antonakis Avolio, & Sivasubramaniam (2003), transactional leadership also known as managerial leadership, emphasizes on supervision, organization, reward induced performance and punishments or sanctions for delays or non-performance. Unlike transformational leaders, those using the transactional approach are not looking forward to change the future but instead, like to keep things the same, while making the best of the status quo. Principals using transactional leadership pay attention to teachers' work to ensure they meet deadlines and produce results.

Transactional leaders also exchange benefits with their subordinates and as such, establish commitment to a goal with option for rewards for its realization and punishments for failure. Most commonly these leaders give rewards for meeting goals and punishment when goals are not realized (Bass, 2008). In the studies carried out by Kendra (2012), transactional leadership is described as a blend of authoritarian/autocratic leadership styles Such a principal works on the premise that employee will work hard only if they are under immense tension and pressure. It is directed at the lower-level of hierarchy of needs (Maslow, 1954). Thus, transactional leadership ensures assignments are done according to standard and in a record time but depriving the subordinate of being part of decisions. The leader takes them all, being directive and bossy (Janitz, 2012).

#### 2.3. Principal Leadership Style and Teacher Productivity

Principal leadership matters in helping a teacher productivity by provision of instructional support through availability of instructional materials as well as regular inspection of teachers work (Aron & Ogbadu, 2010; Leithwood, Day, Sammons, Harris & Hopkins, 2006); Ibrahim and Orodho 2014) established that principals' leadership styles have a significant input on student achievement in national examinations of Kenya. It is a fact that good performance in external examination does not just happen, it is a consequence of good instruction and effective leadership. Louis, Leithwood, Wahlstrom, & Anderson (2010), also found the leadership effect on how students learn as coming from the strength of leadership and academic environment which foster practices particularly instructional, in aid of student achievement. Siskin (1994) and Gronn (2000) reported a significant relationship between democratic leadership styles and teacher job performance. The study of Nias (1994) and Okeniyi (1995) came out with the findings that autocratic principals have employees who work better than those led by democratic leaders. This is a proof that in a certain situation coarsing of teachers to work produces better result than persuading them. But those of Akinyemi (1993) and Akerele (2007) hold a contrary view that is in line with Mgbodile (2004) who opined that autocratic leadership is self-focused, and thus take all the decisions to the detriment of the subordinates, while the democratic style which is people oriented is collaborative, involving all that are concerned. This contradiction in extant literature add to the inconsistency of research findings.

To clarify the inconsistency in research findings of principal leadership styles' influence on teacher productivity coupled with the relatively few numbers of such studies that used full range leadership styles, the researchers hereby ask two research questions and advanced two corresponding hypotheses:

- Is principal leadership style positively related to teacher productivity in a positive manner?
- Which of transformational and transactional leadership better predict teacher productivity?

#### Hypothesis

- H<sub>I</sub> Principal Leadership styles is significantly and positively related to teacher productivity
- H<sub>2</sub>Transformational leadership style better predict teacher productivity than transactional leadership style.

#### 2.4. Teacher Quality

According to Jaiyeoba (2008), a teacher is central to schools' instructional setting. Adesokan (2000) also, aptly asserts that a teacher is the spark and key man in the drive to the progress of educational system. Expectedly, a teacher cannot alone carry out this demanding assignment. He/she must collaborate with other stakeholders of education such as the principal, other teachers/colleagues, students and parents to bring about delivery of good instructions in the classroom setting and thereby improve teacher productivity (Jaiyeoba, 2008). A qualitative teacher understands the subject(s) taught, has the competencies and sound knowledge of the approved curriculum by the education authorities in the country, understands the structure and concepts of learning and lastly, is able to carry the students along in their lessons.

Studies have consistently shown that quality teachers are those who are better trained, more experienced and licensed to teach the subject they are employed to teach (Mayer, Mullens, & Moore, 2000). Similarly, Strong (2011) opined that the definition of teacher quality depends on which angle it is viewed: be it on the teacher's education when it reflects competence and degrees earned, or on quality of the institution the teacher graduated from, pupils' examination scores, teacher certification, subject matter knowledge, credential and experience. Teacher quality can equally be considered from the point of view of the personal qualities of a teacher (which incorporates attributes such as love for children, honesty, compassion and fairness). And it can also be described as the pedagogical standard that a teacher exhibits (using certain teaching strategies, classroom management skills, establishment of positive classroom climate), or as teacher effectiveness, which is ably demonstrated in raising student learning through successful or effective teaching.

In the words of Stronge, Tucker & Hindman, (2004) and Stronge (2007), teacher quality is determined by what a teacher brings to teaching (the pre-requisite and on-going qualification), his/her person which is a combination of the teacher personal and organizational behaviours. Other teacher quality criteria according to Kimani, Kara & Njagi (2013) are the teacher- pupil ratio (work load) in a school, teacher qualification and personal characteristics which include academic qualification, pedagogical training attended, and years of service or experience. In the same parlance, Akin and Ugborugbo (2008) and Adeyemi (2010) found that teacher's experience and educational qualifications were the major factors that determine their quality, which also majorly predict student achievement. When teachers with the right qualifications are equipped with the required skills, expertise, conducive learning environment, and working with a supportive and understanding principal, they can translate their qualities into high productivity which will in turn lead to high students' achievement.

2.5. Teacher Quality and Teacher Productivity

There are many studies in literature relating to aspects of Teacher Quality like teacher qualification, teacher subject matter knowledge, teaching experience separately with student academic achievement which Rice and Schwartz (2008) admit is indicative of teacher productivity.

Guthric (1970) opined that there is a positive association between teacher training variables and standard learning. Ojwang (1995) also found that teacher qualification is significantly related to how student achieve. But (Gal et. al. (1996) found no relationship between teacher qualification and how students perform in examination in Kenya, Egypt and Paraguay. Another research finding is that of Amanchi (1998) who reported that teachers who read education in the university have more professional outputs than those who do not.

Early career experience is beneficial to teacher productivity which is stronger than any other observable teacher-related variables (Clotfelter, Ladd, & Vigdor, 2007; Ladd, 2008; Rice, 2010; Sass, 2007). Furthermore, Ladd, (2008) affirmed that a teacher who has twenty (20) years of experience, is more productive than an inexperienced teacher. And to crown it, (Bridges 1986; Eshiwani, 1986; Ojwang, 1995) in their separate studies found that student whose teacher is experienced have better examination score than those whose teacher is less experienced.

Although the literature is replete with studies on the relationship between aspects of Teacher Quality like teacher qualification, teacher subject matter knowledge, teaching experience separately with Teacher Productivity, the consideration of the composite Teacher Quality in its three dimensions of teacher experience, qualification and teacher professional behaviour in relationship with teacher productivity is scanty if not rare. To fill this literature gap, the researchers put up a research question and advanced the corresponding hypothesis in this study as thus:

- Is teacher quality significantly related to teacher productivity in a positive manner? Hypothesis
  - H<sub>3</sub>: There is a significant and positive relationship between teacher quality and teacher productivity.

#### 3. Theoretical Framework

Social learning theory is a theory of learning and social behaviour which proposes that new behaviours can be acquired by observing and imitating others. (Bandura, 1971). It posits that learning is a cognitive process which takes place in a social context and can occur purely through observation or direct instruction, even in the absence of direct reinforcement (Bandura, 1963). In addition to the observation of behaviour, learning also occurs through the observation of rewards and punishments, a process known as vicarious reinforcement. When a behaviour is rewarded regularly, it will most likely persist; conversely, if a behaviour is constantly punished, it will most likely bring withdrawal of actions that manifests such a behaviour that is frowned at (Renetta, Curran& Maier, 2012).

According to Rotter (1954), using the theory of social learning to explain the present constructs implies that teacher productivity is the desired behaviour, the locus of control is the generalized expectancy that rewards are or are not dependent upon specific behaviours, reinforcements are the rewards from the school principal and the value attached to these rewards. All these ultimately produce the expected changed behaviour by way of increased teacher's productivity. Social learning theory and past empirical studies discussed in above agreed with the proposed theoretical framework. Specifically, social learning theory explains the relationships between transformational leadership style, transactional leadership style and teachers' productivity. Also, social learning theory envisaged positive relationship between teachers' quality and improved teachers' productivity. Extant literature on transformational leadership and teachers' quality suggested that teachers' productivity can be improved when a school has a supportive principal and the teachers are qualitative. The relationships are depicted in Figure 1 based on extant literature, social learning theory and practice/experience.

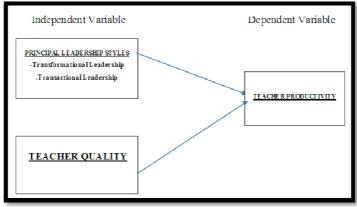


Figure 1: Research Model

## 4. Method

88

# 4.1. Participants

These were Teachers and Vice principals from 39 secondary schools (20 junior and 19 senior) of Lagos State, south west, Nigeria that participated in a 50-day survey in October/November 2017. In total, data was collected from 344

participants comprising dyad pairs of 305 teachers (131 males; 174 females) and 39 vice principals (15 males; 24 females), one from each school.

#### 4.2. Materials

The teacher questionnaire comprises a combination of 21 self-report items of the Multifactor Leadership Questionnaire (MLQ-6S), developed by (Bass & Avolio, 1992; Northouse, 2001) so that teachers rated their perception of their principal leadership styles. An example item is "My principal is autocratic". Responses were on a Likert-type scale, ranging from 1 = "Never", 2 = "rarely", 3 = "Sometimes", 4 = "Frequent" and 5 = "Always". The vice principal questionnaire on the other hand comprise of a combination of an 18-item assessment of teacher quality drawn from (Ndugu, 2014; Stronge, 2007; Stronge, Tucker & Hindman, 2004) and a 23-item productivity assessment questionnaireafter (Adu, Olatundun & Adu, 2016; Ndugu, 2014) such that the vice principal reports their level of agreement or disagreement to the statements. An example item is: "This teacher loves teaching". Responses were on a Likert-type scale, ranging from 1 = "Strongly Disagree", 2 = "Disagree", 3 = "Neutral", 4 = "Agree", 5 = "Strongly Agree.

#### 4.3. Procedure

Since the research is a dyad design involving pairing a set of sampled teachers in a school with the vice principal of the same school, the sampling procedure first involved working out the numbers of schools to be sampled. From a total of 670 junior and senior secondary schools in Lagos State, Nigeria, the recommended minimum number of sample schools from table of sample size corresponding to population from Krejie and Morgan, 1970; Lewis, Sanders & Thombill, (2009) is 30. In addition, Hair, Bush & Ortinau (2009) advocated 100% increase of this size as the number of questionnaires to be distributed. This gives a total of 60 schools that were chosen by systematic sampling and hence 60 vice principals' questionnaires (at one vice principal per each chosen school) that were distributed. Systematic sampling is random selection of elements from a given population. It involves arranging all elements in a giving population in ordinal manner and then randomly select the starting element. Thereafter the subsequent elements are selected at equal interval such that each element selected and the one immediately preceding and succeeding it are at the same interval ordinal position. Consequent upon the determination of the sampling size of vice principal to teachers pairing and sampling procedure was executed, the fieldwork of self-administering questionnaires to collect data was undertaken in three stages: First was familiarization visit to schools from where sample vice principals and teachers came and the date of the actual survey when questionnaires were distributed was fixed for each schools The second stage is the actual distribution of questionnaires and the last is the period between these two visits when there was pre selection of the actual teacher respondents who filled the questionnaires using names of teachers on the teacher's list that was collected from the schools, during familiarization visits. Teachers were selected into sample by random selection of their names drawn without replacement from a bag into which all the separate names of teachers were put, the vice principals and the teachers' questionnaires were equally pre-coded during this period between school visits.

In addition to selection of participants, the quality of the measuring instruments of the variables of research by way of their construct validity using exploratory factor analysis EFA Cooper and Schinder (2001) and of their internal consistency using Cronbach Alpha coefficient of reliability Hair, Black, Babin & Anderson (2014); Ho(2014) were equally carried out,

The result of exploratory factor analysis is as presented thus: PLS, principal leadership styles (KMO=.803, Bartlett's test of sphericity with approx. Chi-Square= 2239.237, p-value = .000 and Total Variance Explained=30.33%, 2 factors: TSL, transactional leadership (3 items), TFL, transformational leadership (7 items) were extracted); TQ, teacher quality (KMO=.791, Bartlett's test of sphericity with approx. Chi-Square= 1666.082, p-value =.000 and Total Variance Explained=35.12%, 3 factors: TQN, teacher qualification (3 items), TPB, teacher professional behavior (4 items) TEX, teacher experience (3 items) were extracted) and TP, teacher productivity (KMO=896, Bartlett's test of sphericity with approx. Chi-Square= 4002.192, p-value= .000 and Total Variance Explained=50.7%, 2 factors: SBF, school based factors (10 items), FES, factors external to school (5 items) were extracted).

In all the study variables, KMO is greater than the minimum threshold of .6 which show that the samples used for the research is adequate for conducting a factor analysis. In like manner, the result of the Bartlett's test of sphericity with a p-value of .000 at p< .01 is thus significant for all variables factored. This supports the fact that a total variance of 30.33% or greater for each of the variables that is explained during factor analysis and factor loading of the items ranges from 0.859 to 0.407.

The result of alpha coefficient of reliability is hereby presented: The transformational leadership subscale consisted of 7 items ( $\alpha$  = .645) and the transactional leadership of principal leadership styles subscale consisted of 7 items ( $\alpha$  = .842), both of principal leadership styles with acceptable reliabilities; while for teacher quality (10 items;  $\alpha$  = .86) and the two subscales of teacher productivity: school based factors(11 items;  $\alpha$  = .907) and external factors (5 items;  $\alpha$  = .821) were equally found to be highly reliable (Hair et al., (2014)).

### 4.4. Data Analysis

89

Three types of analysis were undertaken: two were to evaluate the quality of the research instruments that were used to measure the study variables (Andrew, Paderse & McEvily, 2011; Kinberlin & Winterstein, 2008). Factor analysis for construct validity and reliability analysis to confirm the internal consistency and hence the appropriateness of all the variables' measurement scales. After these stages comes the two-relational analysis that was used to test research hypothesis using correlation and Multiple Regression analyses (Hair et. al., 2014; Pallant, 2011). While correlation provided the degree and manner of association albeit relationship between the independent variables and the dependent

variable, regression predicted the joint effect of the predictor variables on the criterion variable as well as equally show the relative strength of the predictor variables in predicting teacher productivity.

### 5. Findings

The result of the analysis of correlation between each of the independent variables and the dependent variable is shown in Table 1. This result show that there is a significant high positive correlation between transactional leadership style TSL and teacher productivity TP (r=.488, p=.000) and moderate and significant correlation between principal leadership style PLS and teacher productivity TP (r=.381, p=.000).

Correlation										
		PLS	TSL	TFL	TQ	TP				
PLS	Pearson Correlation	1	-	-	.186**	.381**				
	Sig. (2-tailed)				.004	.000				
TSL	Pearson Correlation		1	.105	.472**	.488**				
	Sig. (2-tailed)			.101	.000	.000				
TFL	Pearson Correlation		.105	1	.114	.069				
	Sig. (2-tailed)		.101		.074	.283				
TQ	Pearson Correlation		.472**	.114	1	.186**				
	Sig. (2-tailed)		.000	.074		.004				
TP	Pearson Correlation		.488**	.069	.186**	1				
	Sig. (2-tailed		.000	.283	.004					

Table 1: Results of Correlation between Pairs of Each of the Independent
Variables and Teacher Productivity

\*\* Signify Correlation Coefficient at P=0.01 while Other
Correlation Coefficient R is at P=0.05

But the correlation between transformational leadership and teacher productivity (r=.069, p=.243) and that between teacher quality and teacher productivity (r=.186, p=.004) are both very low to be interpreted as a no significant correlation going by Palant (2007) classification of coefficients of correlation.

Finally, a multiple regression model was tested to investigate the separate association between participants' rating of their perception of their principals' transformational and transactional leadership styles and the vice principals' ratings of teacher quality with vice principals' ratings of teacher productivity. The three predictors were entered into a simultaneous regression model. The results of the regression in Table 2 indicated that two of the three predictors (transformational and transactional leadership styles) explained 25.5% of the prediction of teacher productivity. Using the criteria of positive beta value, t-value >1.65 and p-value<0.05 for accepting a significant positive relationship and positive beta value, t-value <1.65 and p-value>0.05 as indicative of a non-significant positive relationship, the results in Table 2 equally show that transformational leadership TFL ( $\beta$  =-.118, t=-2.111 p=.036) is significantly related to teacher productivity only at 95% significant level and not significantly related to teacher productivity at 99% significant level. But transactional leadership TSL ( $\beta$  = .524, t=8.288, p=.000) significantly predicted teacher productivity in a positive manner both at 95% and 99% significant level. However, teacher quality TQ ( $\beta$  =048, t=-.758, p= .449) is not significantly related to teacher productivity in a positive manner.

Model Summary										
Model	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	Sig					
1	.505	.255	.246	27.496	.000					
Regression Coefficients										
Predictors	UE(B)	SE(β)	t	р						
Constant	3.630		10.160	.000						
TSL	.307	.524	8.288	.000**						
TFL	.129	.118	2.111	.036*						
TQ	061	048	758	.449						

Table 2: Results of Standard Multiple Regression of the IndependentVariables Predicting Teacher Productivity

TP Dependent Variable

\* At P = .05 and \*\* at P = .01

Note: UE Is Unstandardized Error while SE is the Standardized Error

#### 6. Discussion

The result of a significant and positive relationship between principal leadership styles and teacher productivity is in line with past empirical studies (Akinyemi, 1993; Mgbodije, 2004; Akerele 2007; Adeyemi, 2010, Northouse, 2013; Shamaki, 2015; Adu, Olatundun & Adu 2016). All these studies agree that leadership behavior and practice of the school

principal has a profound impact on teacher productivity. This positive and significant relationship between principal leadership styles and teacher productivity does not come as a surprise because the school principal who is the embodiment of the school vision would by deliberate motivation of teachers and ensuring good instructional practice drive teachers into higher productivity (Ibrahim & Orodho, 2014j Louis et al., 2010); Ogbah, 2013;). This unique influence of the school principal is well articulated by (Leithwood, et al. (2006) who saw it coming from motivation of teachers and improved working condition which both increase their commitment to work.

The second aspect of the result that transactional leadership style contributes more than transformational leadership in predicting teacher productivity (52.4% for transactional leadership compared to 11.8% of transformational leadership). This agrees with the major thrust of majority of teachers who prefer to focus more on satisfying the lower basic needs of job protection and so tend to prefer being led through exchange of efforts with reward of the school principals that act as a stimulus to productivity. The teachers are also deterred to face the consequence of sanction which may interfere with the basic need they seek (Maslow, 1954; McGregor, 1960; Bass & Avolio, 1991). In a school setting, where the focus is on instruction, any leader that will succeed must ensure good instructional practice which includes monitoring and supervision of instruction (Arong and Ogbadu, 2010). Also, of importance is the giving rewards as incentive which transactional leadership style emphasizes on and puts in the bargain with subordinates (Leithwood et. al. 2006; Paisey, 1992; Yukl, 2003).

And the third aspect of the result of this study, the absence of significant and positive relationship between teacher quality and teacher productivity is supported by past extant studies that returned a zero correlation i.e. no relationship between each of teacher qualification and experience (representing teacher quality) and students' examination scores (a measure of teacher productivity) particularly in some parts of Africa (Gal, et al., 1996; Kariuki, Ndirangu, Sang & Okao, (2014); Ndugu, 2014; Rivkin, Hanushek, & Kain, 2002;). The no relationship between teacher qualification and productivity is an indication that qualification does not guarantee teacher productivity. What does is the quality of teacher practice by way of spending time to prepare lessons, marking class assignments as well as the homework that is given to students (Coilloids,1989; Onwuachu, 2007). And teachers' extensive experience, particularly teaching the same subject(s) in the same class over long period of time can produce negative influence on their teaching motivation and hence be inimical to the productivities of teachers (Ndugu, (2014).

#### 7. References

- i. Abdulkareem, A (2011). Management of educational facilities in Nigerian secondary schools: The roles of administrators and inspectors
- ii. Adeogun, A. A. (2006). Training and Experience as Predictors of Teacher's Productivity in Secondary Schools in Nigeria. International Journal of Educational Management.4, 38-49.
- iii. Adesokan, Z. A. (2000). Music: A living power in Nigerian educational system" in Olorunsogo, I. A. O. (ed), Journal of Conference of Music Educators of Nigeria. 1 (1),18 26.
- iv. Adeyemi, T.O. (2006). Fundamentals of educational management. Lagos: Atlantic Associated Publishers
- v. Adeyemi T (2008) Organizational climate and teachers' job performance in Primary schools in Ondo State, Nigeria: an analytical survey. Asian Journal of Information Technology 7(4), 138 –145
- vi. Adeyemi, T. O. (2010) Principals' leadership styles and teachers' job performance in senior secondary schools in Ondo State, Nigeria. Journal of Education Administration and Policy Studies, 2 (6), 83-91.
- vii. Adeyemi, T.O. (2011), "Principals" Leadership Styles and Teachers" Job Performance in Senior Secondary Schools in Ondo State, Nigeria", Current Research Journal of Economic Theory, vol. 3, no. 3, pp. 84-92.
- viii. Adu E.O, Oshati T, &Eze I. (2012). Career advancement, school relation and support factors as determinant of teacher productivity in public schools in Oyo state. Nigeria. International Journal of Education, 4(4): 27-40.
- ix. Adu E.O, Oshati T, &Eze I. (2013). Teachers' workload and gender as determinant of teacher productivity in public schools in Oyo state, Nigeria. European Journal of Educational Sciences, 1(1): 14-25
- x. Adu, E. O. (2015). Institutional, personal and reward system factors as determinants of teachers' productivity in public secondary schools in Oyo State, Nigeria. Journal of Social Science 45(1):1-7.
- xi. Adu, K.O., Olatundun S.A. & Adu E.O. (2016). Factors Hindering Teachers' Productivity in Public Secondary Schools Journal of Social Science, 49(1, 2):70-76 (2016).
- xii. Ahiaba, K.P. (2002). Training and experience as correlate of teachers' productivity in secondary schools in Ojo Local Education District of Lagos State. A PGDE project, Adekunle Ajasin University. Akungba, Ondo State Nigeria.
- xiii. Ajayi, I.A & Afolabi C.Y. (2012). Participatory management and productivity among secondary school teachers in South West Nigeria. Research Journal of Organizational Psychology and Education Studies, 1 (6), 332-337.
- xiv. Akerele, S.A., (2007). Principals' leadership styles and teachers' job performance in Lagos State Public Secondary Schools. Unpublished M. Ed Thesis, University of Ado-Ekiti, Nigeria, pp: 110-124.
- xv. Akinyemi, A., (1993). Job satisfaction among teachers in Ondo State Secondary School. J. Edu. Leadership, 29(4).
- xvi. Akiri, A. A. & Ugborugbo, N.M. (2008). An Examination of Gender's Influence on Teachers' Productivity in Secondary Schools. Journal Social Science, 17(3), 185-191.
- xvii. Akporehe, D.A (2011). The Impact of Environment on Productivity in Secondary Schools. African Journal of Education and Technology. 1(1),
- xviii. Ali, E., & Hale, E. (2009). Predicting organizational trust level of school managers and teachers at elementary schools. Procedia-Social and Behavioral Sciences, 1(1), 2180-2190.
- xix. Amanchi, D. (1998). Accountability in Nigeria school: Towards a posture for better education. Journal of Nigerian Educational Research Association., 1(2), 85–91 Nigeria perspectives. Port Harcourt: Harey Publications Company

- xx. Andrew, D. P., Pedersen, P. M., & McEvoy, C. D. (2011). Research methods and design in sport management. Human Kinetics.
- xxi. Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor Full-Range Leadership Theory using the Multifactor Leadership Questionnaire. The Leadership Quarterly. 14 (3), 261-295. doi: 10.1016/S1048-9843(03)00030-4
- **xxii.** Arikewuyo M. O& Adegbesan O. (2009). Elements of personnel management. in J.B. Babalola, & A.O. Ayeni (Ed.). Educational Management: Theories and Tasks. Ibadan, Macmillan.
- xxiii. Arikewuyo M. O. (2009) Professional Training of Secondary School Principals in Nigeria: A Neglected Area in the Educational System Florida Journal of Educational Administration & Policy Summer 2009 Volume 2, Issue2
- xxiv. Avolio, B. J. (1999). Full leadership development. Thousand Oaks, CA: Sage.
- xxv. Avolio, B.J. & Bass, B.M. (1991). The full range of leadership development Binghamton, NY: Bass, Avolio & Associates
- xxvi. Avolio, B.J. & Bass, B.M. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. Journal of Occupational & Organisational Psychology, 72 (4), 441-462
- xxvii. Bandura, A. (1963). Social learning and personality development. New York: Holt, Rinehart, and
- xxviii. Bandura, A. (1971). Social learning theory. General Learning Corporation.
- xxix. Barbuto, J. E. (2005). Motivation and transactional, charismatic, and transformational leadership: A test of antecedents. Journal of Leadership and Organizational Studies, 11(4), 26-40
- xxx. Bass B. M. (1985) Leadership and performance beyond expectation. New York: Free Pres (1998). Transformational leadership: Industry, military, and educational impact. (4th ed.). New York, NY: Free Press
- xxxi. Bass, B.M. (2008). The Bass handbook of leadership: Theory, research, & managerial applications
- xxxii. Bass, B.M., & Avolio, B.J. (1992). Developing transformational leadership: 1992 and beyond. Journal of European Industrial Training, 14 (5), 21-27.
- xxxiii. (1992) Multifactor Leadership Questionnaire MLQ-6S Copyright © 1992
- xxxiv. Bernolak I. (2009) Succeed with Productivity and Quality: How to Do Better with Less American Society for Quality. Quality Press Milwaukee, Wisconsin 53203.
- xxxv. Borisade, T.F. (2013). Falling standard of education: A case of Ekiti State College of Education. European Scientific Journal 9(9):112-122.
- xxxvi. Branch, G., E. Hanushek, & S. Rivkin (2012) 'Estimating the effect of leaders on public sector productivity: The case of school principals,' Working Paper 17803 National Bureau of Economic Research.
- xxxvii. Bridges, E. (1982) 'Research on the School Administrator: The State of the Art, 1967–1980', Educational Administration Quarterly 18(3): 12–33.
- xxxviii. CASTME (2001) International Formal of education development 2001; 361 374.
- xxxix. Chandan, J.S. (1987). Management Theory and Practice. New Delhi: Vikas Publishing Houston.
  - xl. Clark, D. (2000). Leadership Styles. Retrieved From http./www.nwlink-com/-donclark/leader/leaderst/html on July 12, 2018
  - xli. Clotflelter, C.T., Ladd, H.F., & Vigdor, J.L. (2007). "How and why teacher credentials matter for student achievement." National Bureau of Economic Research Working Paper.12828. Also available on the CALDERCenter.org web site.
  - xlii. Coilloids F. (1989). The prospects for educational planning: Paris UNESCO IIEP
  - xliii. Eshiwani, G. (1986). Education in Kenya since Independence. Nairobi: East Africa Educational Publishers.
  - xliv. Eze-Thecla A. Y. (2016) Teachers' Perception of the Impact of Training and Retraining on Teachers' Productivity in Enugu State, Nigeria. Journal of Research in Business and Management Volume 4 ~ Issue 3(2016) pp: 33-37 ISSN (Online): 2347-3002 www.questjournals.org
  - xlv. Fabunmi, J. O. (1986). Social and legal implication of the 6-3-3-4 system of education in Nigeria. Journal of Ancops, 2 (1), 45-62.
  - xlvi. Federal Republic of Nigeria (2004). National policy on education. Lagos: Federal Ministry of Education
- xlvii. Gall, M. D., Borg, W. R., & Gall, J. P. (1996). Educational Research: An introduction (6th ed.). New York: Longman Gallagher (2004),
- xlviii. Gronn, R., (2000). Distributed properties: a new architecture for leadership. Edu. Manage. Admin., 28: 317-38
- xlix. Hair, J. F., Black W. C., Babin, B. J. & Anderson, R. E (2014). Multivariate data analysis (8th ed.). Upper Saddle River, NJ: Prentice hall.
  - I. Hair, J.F., Bush, R.P., & Ortinau, D.J. (2009). Marketing research: In a digital information environment. 4th Edition. p312, 322, 370 (2008)
  - Ii. Ho R. (2014) Handbook of Univariate and Multivariate Data Analysis and Interpretation with IBM SPSS CRC Press Taylor & Francis Group
  - lii. Ibrahim, A.H & Orodho, A.J. (2014). Strategies applied by the Board of Management to enhance students' academic performance in National Examinations in secondary schools in Mandera County, Kenya. Journal of Education and Practice. Vol 5, No.20, 2014 pp.1-20 www.iiste.org.
- liii. Ibukun, W.O. (2009). Build the future: Invest in teachers now. Paper presented at the World Teachers Day, 5th October 2009, held at Akure, Nigeria.
- liv. Jaiyeoba, A.O. (2008). The National Policy on Education and its impact on secondary school administration in Oyo State. Africa Journal of Educational Management, 5 (182): 155-159

- lv. Jantzi, R. C. (2012). Innovation in academic libraries: An analysis of university librarians' perspectives. Library and Information Science Research, 34 (1), 3-12. http://doi.org/10.1016/j.lisr.2011.07.008
- lvi. Joyce, E., & Judge, T. A. (2004). Personality and Transformational and Transactional Leadership: A Meta Analysis. Journal of Applied Psychology. 89 (5), 901-910 doi:10.1037/0021-9010.89.5.901.
- Ivii. Kariuki, K.W.A; Ndirangu, M., Sang, K. A., & Okao, M. E. (2014). Secondary school teachers' perceptions of the factors that influence their morale and commitment to work: A case of Nakuru district. International Journal of Innovation and Applied Studies ISSN 2028-9324 Vol. 9 No. 4 Dec. 2014, pp. 1589-1597
- lviii. Kendra, C. (2012) Leadership Theories: The 8 Major Leadership Theories. Retrieved from http://psychology.about.com/od/leadership/p/leadtheories.htm> [26/3/2012]
- lix. Kiboss, J. K., & Jemiryott, H. K. (2014). Relationship between Principals' Leadership Styles and Secondary School Teachers' Job Satisfaction in Nandi South District, Kenya. Journal of Education and Human Development, 3(2), 493-509.
- Ix. Kimani, G.N., Kara, A. M., & Njagi, L. W. (2013). Teachers' factors influencing Students' Academic Achievement in Secondary Schools in Nyandarua County, Kenya. International Journal of Education and Research, 1(3), 1-14
- lxi. Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. American Journal of Health-System Pharmacy, 65(23), 2276-2284
- lxii. Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30, 607–610.
- lxiii. Ladd, H. F. (2008). "Value-Added Modeling of Teacher Credentials: Policy Implications." Paper presented at the second annual CALDER research conference, "The Ins and Outs of Value-Added Measures in Education: What Research Says Washington, D.C., November 21. http://www.caldercenter.org/upload/Sunny Ladd presentation
- Ixiv. Leithwood K., Day C., Sammons P., Harris A. & Hopkins D. (2006). Successful School Leadership What It Is and How It Influences Pupil Learning' Research Report No 800 © University of Nottingham 2006 ISBN 978 1 84478 822 4 132pp
- Ixv. Lewis P., Saunders M.N.K & Thornhill, A. (2009). Research Methods for Business Students (5th Edition) Pearson Education Limited
- lxvi. Louis, K. S., Leithwood, K., Wahlstrom, K., and Anderson, S. (2010). Investigating the links to improved student learning: Final report of research findings. Retrieved from Wallace Foundation website: www.wallacefoundation.org/knowledgecenter/schoolleadership/keyresearch/Documents/Investigating-the-Links-toImproved-Student-Learning.pdf
- Ixvii. Manjunath, L., Tyagarajan, S., Vasant K., J. & Ansari, M.R. (2008). Determinants of scientific productivity of agricultural scientists. Karnatak a Journal of Agriculture Science, 21 (3), 44-68.
- Ixviii. Maslow, A. (1954). Motivation and Personality. New York; Harper.
- Ixix. Mayer, D.P., Mullens, J.E., & Moore, M.T. (2000). Monitoring school quality: An indicators report (NCES 2001-030). U.S. Department of Education, Office of Educational Research and Improvement. Washington, DC U.S. Government Printing Office.
- Ixx. McGregor, D. (1960) The Human Side of Enterprise. New York: McGraw Hill.
- lxxi. Mgbodile T.O. (2004), (Ed) Fundamentals in educational administration and planning Enugu. Magnet Business enterprises
- lxxii. Mustapha, G. (2008). A reflection of the revised syllabus translated in textbooks. Journal of International Management Studies, 11 (4), 81-96.
- Ixxiii. Ndugu M. M. (2014). Quality and productivity of teachers in selected public secondary schools in Kenya. Mediterranean Journal of Social Sciences, 5(5), 103-125.
- Ixxiv. Ng 'ethe, J.M., Namasonge, G.S. &Mike, A.I. (2012). Influence of Leadership Styles on Academic Staff Retention in Public Universities in Kenya. International Journal of Business and Social Science, 3 (21), 297- 302. European Scientific Journal May 2015 edition vol.11, No.13 ISSN: 1857 7881 (Print) Nias, J., (1994) Teachers appear to respond positively to a leader who knows what he wants and gets the job done. J. Edu. Osuajoe, 1(1): 59-71.
- Ixxv. Northouse, P.G. 2001. Leadership Theory and Practice, second edition. Thousand Oaks, CA: Sage Publications, Inc.
- Ixxvi. Northouse, P.G. 2013. Leadership Theory and Practice, sixth edition. Thousand Oaks, CA: Sage Publications, Inc.
- Ixxvii. Nwokeoma, J. (2010). Exam failure, education minister and dearth of teachers in Nigeria. Retrieved on from pointblanknews.com
- Ixxviii. Ojwang J.A (1995) A study of quality of education in private Secondary schools in Siaya and Kisumu Districts. Unpublished M. Phil Thesis, Moi University, Kenya.
- lxxix. Okeniyi, C.M., (1995). Relationship between leadership problems and school performance in Oyo State secondary schools. Unpublished M. Ed. Thesis, University of Ibadan.
- Ixxx. Omisore, B. O. (2014). Supervision Essential to Productivity Global Journal of Commerce and Management Perspective, Vol.3 (2):104-108 (March–April, 2014) ISSN: 2319 728
- Ixxxi. Onyeike, V. C. & Vinari, J. T (2013). Planning of secondary education in Nigeria: Challenges and prospects, in Oni, S. (Ed), challenges and prospects in African education systems. New York, NY: Traford Publishers
- Ixxxii. Osagie, R. O. (2011). Teacher development and teacher productivity in secondary schools in Edo State, Nigeria. pp. 1085-1096. The Asian Conference on Education 2011 official proceedings, Japan. recent development in theory and research (135-150), Washington, D.C.
- Ixxxiii. Otieno, K. (1997). The relationship of role overload, locus of control, years of teaching experience and gender to perceived burnout among secondary school teachers in Nairobi. Unpublished M.E.D thesis, Kenyatta University

- Ixxxiv. Owens, R. (2001). Organization behavior in education: Instructional leadership and school reform. Boston: Allyn & Bacon
- Ixxxv. Paisey, A. (1992). Organisation and Management in Schools. 2nd edition. New York: Longman publishing.
- Ixxxvi. Pallant, J. (2007). SPSS survival manual: A step by step guide to data analysis using SPSS (3<sup>rd</sup> ed.). AustraliaAllen & Unwin Book Publishers
- Ixxxvii. Pallant, J. (2011). SPSS survival manual: A step by step guide to data analysis using SPSS (4th ed.). Australia: Allen & Unwin Book Publishers.
- Ixxxviii. Peter, J. K. and Isaac. E. O, (2013). Adequacy–Inadequacy: Education funding in Nigeria Universal Journal of Education and General Studies (ISSN: 2277-0984) Vol. 2(8) Rice & Schwartz, (2008)
- Ixxxix. Renetta, C., Curran, D. & Maier, S. (2012). Women, Men, and Society. London: Pearson Inc.
  - xc. Rice, E. M., & Schneider, G. T. (1994). A decade of teacher empowerment: An Empirical analysis of teacher involvement in decision-making, 1980–1991. Journal Educational Administration, 32(1), 43–58
  - xci. Rice, J. K. (2010) the Impact of Teacher Experience Examining the Evidence and Policy Implications National CALDER BRIEF 11 AUGUST 2010.
  - xcii. Rivkin, Hanushek, & Kain, (2002); Rivkin S.G., Hanushek E.A. & Kain J.F. (2005). Teachers, schools, and academic achievement. Econometrica no. 2 (March): 73:417–58
  - xciii. Rotter, J. B. (1954). Social learning and clinical psychology. New York: Prentice- Hall
  - xciv. Saari, S. (2005). Productivity. The theory and measurement of business. ESPOO. Finland: European Productivity Conference.
  - xcv. Saari, S. (2006). Productivity: The theory and measurement in business. Productivity Handbook (in Finish). MIDOOY 272.
  - xcvi. Sass, T. R. (2007). The determinants of students' achievement: Different estimates for different measures. A paper presented at the first annual CALDER Research Conference. Washington, DC. October, 4. Sheehan, J. (1973). The economics of education. London: George Allen and Unwin Limited
- xcvii. Sass, T., Hannaway J., Xu Z., Figlio D., & Feng L. (2011). Value added of teachers in high -poverty schools and lower poverty schools: Implications for research, policy and management. Working Paper 52, National Center for Analysis of Longitudinal Data in Education Research.
- xcviii. Shamaki, E. B. (2015) Influence of Leadership Style on Teacher's Job Productivity in Public Secondary Schools in Taraba State, Nigeria Journal of Education and Practice www.iiste.org ISSN 2222-1735 (Paper) ISSN 2222-288X (Online) Vol.6, No.10, 201
- xcix. Siskin, L.S., (1994). Realms of Knowledge. Academic Departments in Secondary, Falmer Press, Washington DC.
  - c. Sistus, O.T. (2008) Problem of Education in Nigeria. The Nigerian Observer. Online Retrieved Sunday 27 March 2011 from www.nigerianobserversnews.com
  - ci. Sofoluwe A. O. (2012), Innovative Strategies for Financial Management in Nigerian Public Secondary Schools US-China Education Review B 2 (2012) 224-235 earlier title: US-China Education Review, ISSN 1548-6613
  - cii. Strong, M. (2011). The highly qualified teacher: What is teacher quality and how do we measure it? New York: Teachers College Press.
- ciii. Stronge, J. H., Tucker P. D. & Hindman, J. L. (2004). Handbook of qualities of teachers. Association for Supervision and Curriculum Development, 1703 N. Beauregard St. Alexandria, VA 22311-1714.
- civ. Stronge, J. H. (2007). Qualities of effective teachers. Association for supervision and curriculum development 1703 N. Beauregard St. Alexandria, VA 22311-1714 USA.
- cv. Uko, E. S. (2015). Principalship and effective management of facilities in secondary schools in Cross River State Nigeria. International Journal of Academic Research and Reflection, Vol. 3(No. 1) Winston.
- cvi. Yesufu T.M. (2000). The Dynamics of Industrial Relations: The Nigeria Experience, Ibadan: University Press Limited
- cvii. Yukl, G. A. (1998). Leadership in organizations. Englewood Cliffs, NJ: Prentice Hall
- cviii. Yukl, G. (2000) An Evaluation of the Conceptual Weaknesses in Transformational and Charismatic Leadership Theories. Leadership Quarterly. 10(2), 285–305.
- cix. Yukl, G.A. (2003). Leadership in Organizations, 5th ed. Upper Saddle River, NJ: Prentice-Hall.