



P RINCIPAL MANAGEMENT COMPETENCY AS A PREDICTOR OF TEACHERS' JOB PRODUCTIVITY IN PUBLIC SENIOR SECONDARY SCHOOLS IN ADAMAWA STATE, NIGERIA

ABSTRACT

Factors that define teachers job productivity has long been empirically sought using different approaches, and series of conclusions have been arrived at along with recommendations that meant to position teachers to be more productive. However, the common scenario is that the principal has less been considered as a factor that determine teachers job productivity. Also, teachers' job productivity has long been wrongly

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INTRODUCTION

Management implies directing people towards achieving the goals and objectives of an organization. According to Boyd and Hord (2016) management is the co-ordination of all the resources (both materials and human) of an organization through the process of planning, organizing, directing and controlling in order to attain organization objectives. School management is an onus task for school principal to ensure that activities of the school are channeled toward achieving both the school and broader education objectives. The trends and layers of activities within the school system imply that principals have to be most effective and competent leaders for overall success of school activities. It is not surprising to educators to realise that an average day in the life of a principal is filled with last-minute student emergencies, teachers' supervision, attending meetings, receiving visiting monitoring teams from the ministry, attending to angry parents and listening to pleas from hosting community to the school. Almost all days principals faced with daunting tasks as leaders in schools before closing of school for a day.

Abdikadir (2018) opined that the principal management effectiveness is mostly misconstrued as leadership styles. However, the leadership style could be adjudged as style or strategy chooses by the principal to manage his/her school.



assessed as most works limited the scope to students' performance. This study examines the principal management effectiveness as a predictor of teachers' job productivity in public senior secondary schools in Adamawa state, Nigeria. The study was based on survey research design. Teachers were randomly selected across senior public secondary schools in Adamawa State. Two instruments named Principal Management Effectiveness Rating Scale (PMERS)" and "Teachers' job productivity Rating Scale (TJPRS)" were used for data collection. The obtained data were analyzed using linear regression at 0.05 significant level. The study established that principal supervision competency significantly promotes teachers' job productivity. Principal resources management significantly promote teachers' job productivity. Principals time management significantly influences teachers' job productivity. The study concluded that principal management effectiveness promotes teachers' job productivity. The study recommends among others that principal need to be trained on various supervision modes for more effectiveness in teachers' job productivity.

Keywords: Supervision, Resources Management, Time Management, and Job productivity.

Furthermore, the management effectiveness is broader in scope as it is pointed not at the approach used by school principal but at outcome of principal inputs as manager of many school variables. Thus, the management effectiveness of any principal irrespective of style should be determined through how successful the principal is in making critical school decisions, managing learning resources, supervising both staff and students, delegating power among others. One of the indicators to determine the principal's management effectiveness in a school is teachers' job productivity. According to Ahmed and Mohamad (2016) job productivity is the sum total of inputs to output ratio of any teachers within the schools. Thus, teacher's job productivity implies the overall teacher's responsibilities in school to ensure that school attain the objectives of education.

Teachers' job productivity has attracted an enormous attention at all levels of education worldwide. This is because teachers' productivity constitutes the fulcrum through which investment in education that is transformed into reality. Teachers' productivity is a measure of the efficiency with which the overall process of teaching and learning utilise its labour force (Ayeni & Akinola, 2018). According to George (2019), teachers' job productivity is basically how teachers adequately control teaching and teaching resources to positively influence the learning outcome of students. Therefore, it can be argued that teachers' job productivity dealt with teachers' effectiveness in both curriculum and extra-



curricular activities of the school. In this study, therefore, teachers' job productivity is the effective and efficient utilization of teachers in the process of teaching and learning in schools. The measurement for teachers' job productivity include the level of teachers' participation in decision making, the level of teachers' involvement in outdoor activities, the teachers workload efficiency, teaching competency, teamwork, task accomplishment and students success rate. According to Craig, Richard and du-Plessis (2018) teachers need supervision and supportive management roles from principal to meet the daily needs and challenges facing them in teaching and learning activities across the educational levels.

One of the management factors of principal that can predict teachers' job productivity in school is supervision. The effectiveness of school principal in supervising his/her teachers could determine the overall teachers' competency in their various classrooms. Principal is the school-based supervisor for the teachers, the commendations and recommendations from principals to teachers based on teachers' performance in teaching activity could define teachers' competency which can further affect students' performance and overall school success rate. According to Ahmad (2017) the aspects of lesson plan preparation, teaching skill, lesson delivery, classroom management, and evaluation which define teachers' teaching competency can be modified by principal supervision. Unsupervised teachers may be less productive in teaching aspects and in overall affects school job productivity.

Also, the resource management capability by school principal can influence teachers' job productivity, especially, the aspect of task completion among others. Michael (2019) noted that resources management by principal spanned across both physical and other learning resources including human resources. The competency of principal in management of learning facilities such as school physical structures, printing and non-printing instructional materials, other school facilities as well as monetary resources define what teachers have at disposal to work with and to some extent teachers could achieve the set objectives in their lesson. Emetarom (2015) and Eze (2016) expressed that teachers job effectiveness can be attributed to resource provided by school as well as suitability of such resources. Poor or lack of resources could hampered teachers' inputs in teaching and learning activities and affect the output such as task accomplishment rate, students' performance and overall school success rate.

Time management started with the industrial revolution and became the modern notion of doing things effectively and efficiently. The ability of principal to manage time effectively becomes a fundamental to teachers work performance. In fact, development of communication technology for instance, cell phones, and internet have become major agents of time wasters nowadays that has brought many requests or suggestions of things to do than ever and has influenced the failures among employees in accomplishing their task on time include teachers at school (Alimba, 2018). Thus, it requires principal management skills to ensure that teachers utilize the school time judiciously. Failure to



adhere to school time usage could account for low job productivity and huge uncompleted task.

In Adamawa state, government in the state ensures that every school is with principal and at least a vice principal to ensure effective management strategies that can guarantee maxima job productivity among teachers. However, it is disturbing to note that despite the level of investment in leadership in the school by state government, the students' academic performance in Secondary School Certificate Examination (SSCE) in the state gives the impression that teachers' productivity is low. This then fall back to how the students are taught in the schools; as most teachers are exhibiting poor morale, low job commitment, lacking dedication, poor school representation and poor teaching skills among others. Hence, the principals as school based supervisor are daily reporting to their work and giving impression of performing their duties. However, the extent at which principal management strategy influences teachers' job productivity in Adamawa State remains unknown. It is against this background that this study is set up to investigate the effect of principal management strategies on teachers' job productivity in Public Secondary Schools in Adamawa State, Nigeria.

Statement of Problem

Among the challenges facing our educational system today is job productivity among teachers. The annual revelation of decline in performance in general and specific subject in Senior Secondary School Examination Results shows that the problem exists. Earlier efforts from concerned educationists and researchers (Yusuf & Yusuf, 2013; Ayeni & Akinola, 2018; Ayeni, 2017; Awodoyin, 2012) have shown that to some extent teachers have some portion of blame to take regarding dwindling performance in various examinations. Among the teacher's related factors earlier identified include; teaching method and teaching skills (Olushola, 2021), teachers demand and supply (Olagboye, 2019), teachers qualification (Bahr, Kinzer, & Rieth, 2013), years spend in services by teachers (Elmore, 2017), teachers' attitude and interest in teaching (Ayeni & Akinola, 2018), as well as principal leadership styles (Liu & Tsai, 2017; Balogun, 2015). However, very little studies considered principal management effectiveness as predicts of job productivity.

Evidences from earlier studies by Scott and Michael (2018), Mohammed and Omar (2019), and Bahr et al. (2013) have shown that principal leadership roles and competency such as supervision, decision making, role delegation, conflict and workforce diversity management positively impact on teachers' job productivity. However, most of these empirical studies were conducted outside Nigeria, where level of school management are likely to be standard and regulated than that of Nigeria. Also, studies by Kwang et al., (2019) and Elmore (2017) established that there is yet to be an evidence of job productive among teachers' relative to the principals' managing their daily roles as teachers in



Nigeria. They argued that most teachers seem to be operating in isolation of principal guides. Also, they maintained that the performance of many teachers justify that principals may not have been playing their roles as expected.

Ability of principals to guide teachers toward job productivity differs across the state due to variation in the management competency of school principals such as capability to manage difference among teachers, promptness of taking decision, resource management capability, role delegation, and supervision. Then, the variation in leadership competency of principal is expected to play some effect on teachers' overall job productivity among teachers in senior secondary schools in Adamawa state. Therefore, the current study is set up to investigate whether principal management strategy predicts teachers' job productivity in Public Secondary Senior Schools in Adamawa State, Nigeria.

Objectives

1. To determine the effect of principals' school supervision on teachers' job productivity in senior secondary schools in Adamawa State
2. To ascertain the effect of principals' resources management on teachers' job productivity in senior secondary schools in Adamawa State
3. To determine the effect of principals' time management on teachers' job productivity in senior secondary schools in Adamawa State

Hypotheses

- Ho₁: There is no significant effect of principals' school supervision on level of teachers' job productivity in senior secondary schools in Adamawa State
- Ho₂: There is no significant effect of principals' resources management on level of teachers' job productivity in senior secondary schools in Adamawa State
- Ho₃: There is no significant effect of time management by principal on level of teachers' job productivity in senior secondary schools in Adamawa State

Literature

Principal as school based supervisor

Principal's supervisory role is a critical issue in educational leadership. It involves lots of leadership supervision of teacher's skills, students' academic performance, effectiveness of the teachers and technical skills. The National Policy of Education (2004) under the Ministry of Education revealed how the principal prime role of educational leadership, must be effective. Principals are responsible for the administration of admission, health, lunchroom, textbooks, supplies, records and many other auxiliaries in the educational system. Therefore, the role of a school administrator or a principal is to supervise, plan and developed competitive strategies for the school. The principal is thus faced with the responsibility of supervising teachers generally to improve their instructional



performance effectively, make recommendations and also manage both human and material resources. Thus, principal serves as the head of the school, as the architect of the quality of activities in the school and the quality of academic achievement of students depends on the quality of instructional performance.

The principal holds the major position in the programme of instructional improvement through effective and efficient supervision of teachers' instructional performance through various supervisory techniques, it becomes peremptory that principal's supervisory functions must be adequate to influence teacher's instructional performance. This desired expectation in education could be achieved through effective supervision since it creates the awareness of sound education philosophies in teachers (Maigeri, 2018). Above all, the principals are required to supervise and monitor the work and behaviour of teachers, in order to improve individual teacher's competencies no matter how proficient they are deemed to be and provide students with quality learning. The duty of ensuring that effective teaching and learning take place lies with the principal who employs various instructional performance.

Resources management at school

Of all the onerous problems facing secondary school education, none is as persistent as the one relating to the management of resources. Resources are limited and need to be properly utilized to support educational improvement objectives to a great extent. They are inputs in school systems which should be distributed, utilized and managed by the school manager to encourage successful teaching and learning in order to optimize school output and continuous school improvement. A review of previous educational programmes in the country shows that resource inadequacy has been a significant element in chronic education failings (Fafunwa, 1974; cited in Ekpenyong, Okon, & Imo, 2018; Taiwo, 1985 cited Ezeani & Oladele, 2016; Aiyepetu, 1989 in Maigeri, 2018). Resources are elementary implements required in the real performance of tasks and for the growth and development of human organization (Ekpenyon et al., 2018). The composition of a resource is determined by its uses to which it can be fixed into. Resource can be seen as a stream apparatus from which benefit is produced. Advantages of resource deployment may include increased wealth or wants, proper functioning of an institution or a system. Dearth of resources is not always the problem holding schools back; in countless situations, it is the nonexistence of management, proficiency and the resolve to use resources effectively. Maigeri (2018) corroborated that the degree of productivity and attainment in an institution depends on the sufficiency of the planning and usage of resources.

Effective time management at school

Resources to every serious and business minded leader is everything, and time is an indispensable among other firm's resources that no firm could afford to joke with. Every



second wasted are irrecoverable, and time change in a dynamism manner such that its change happens in the firm. Every wasted minute in schooling has gone forever. This shows that school has to define its way of using time, instead of waiting or wasting the limited available time. Balogun (2015) expressed that managing times remains one of the organizational tasks through well planned events that has identified the require time needed to complete a given task. In education, especially at school, events identification and planning are the required skills lead to formulation of school calendar to limit the numbers of interferences of other activities that likely to interplay whenever one task is ongoing. Every effort has been made to ensure that time allocated for particular task is judiciously used to ensure the completion of process and able to adjust events that would interfere with its completion.

In school, time management is not about getting more things done in a day. It is about getting the things that matter most done. Time management in an organisation implies ability to decide what is important to the firms and anticipate process to achieve it. Time is that quality of nature which keeps all events to happening simultaneously. Managing time in any organisation including school required identification of various school activities both indoor and outdoor school events as well as time taken to accomplish each identified events. Thus, time management can be expressed as a set of principles, practices, skills, tools and system that help individual or firm to judiciously use their time to accomplish their set goals.

Effective time management remains one of the major keys to attaining higher level of performance. Emetarom (2015) argued that effective time management in the school does not only influence productivity of individual teachers, but also helps them coping with stress, conflicts and pressure more efficiently. Through time management, teachers can maintain a healthy work-life, balancing their lifestyle with nature of their jobs and keeps them motivated through the teaching and learning activities as well as other assignment (Eze, 2016). Time management training is one of the most effective tools that each principal needs to invest on to enhance the productivity and efficiency of their teachers. The scope of time management is not a solitary role of principal at school, the roles spanned to individual teachers as well as non-teaching staff, parents, students among others, all have to see time as the most valuable asset afford them to gain better from teaching and learning process (Vickery, Droge & Germain, 2019).

METHODOLOGY

The research design adopted for this study is a survey research design. The area of this study is Adamawa State, north-eastern Nigeria, with its capital at Yola. Adamawa state has twenty-one local government area, with five education zones. The population of this study is 7,285, which comprises of 6,984 teachers and 301 principals across the 301 public senior secondary schools located in the five education zones in Adamawa State. The



sample size for this study is 600 staff comprising 375 teachers and 225 principals from total 75 senior secondary schools across five education zones in Adamawa State. The study used multistage sampling procedure. The instruments for this study were structured questionnaires tagged “Principal Management Effectiveness Rating Scale (PMERS)” and “Teachers’ job productivity Rating Scale (TJPRS)”. The items on both PMERS and TJPRS were designed using five – point Likert like response scale. The null hypotheses were tested using linear regression analysis. The decision rule for testing the null hypotheses were to reject null hypotheses when $p < 0.05$ or otherwise not to reject when $p > 0.05$.

Results and Discussion

Hypothesis One: There is no significant effect of principals’ school supervision on level of teachers’ job productivity in senior secondary schools in Adamawa State

Table 4.5.1: Regression Analysis on Influence of Principals’ School Supervision on Level of Teachers’ Job Productivity in Senior Secondary Schools in Adamawa State

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.438	.921		4.816	.000
	Principals’ School Supervision	.599	.073	.551	8.149	.000

a. Dependent Variable: Teachers’ Job Productivity

Adjusted -R² =0.299, ANOVA (F) = 66.405, df (1, 152), p-value =0.00

Table 4.5.1 revealed the results of linear regression analysis on influence of principals’ school supervision on level of teachers’ job productivity in senior secondary schools in Adamawa State. The results showed adjusted R² =0.2999, F =66.405, p-value =0.000. This showed that about 30% of variation in the teachers’ job productivity can be explained by the dependent variable. More so, the coefficients $\beta =0.551$, $t =8.149$, p-value 0.00, suggested that principals’ school supervision significantly influence teachers’ job productivity by about 55%.

Hypothesis Two: There is no significant effect of principals’ resources management on level of teachers’ job productivity in senior secondary schools in Adamawa State

Table 4.5.2: Regression Analysis on Influence of Principals’ Resources Management on Level of Teachers’ Job Productivity in Senior Secondary Schools in Adamawa State

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.352	.675		3.486	.001
	Principals’ Resources Management	.755	.047	.723	16.065	.000



a. Dependent Variable: Teachers' Job Productivity

Adjusted $R^2 = .521$; ANOVA ($F = 258.086$, $df (1, 152)$, $p\text{-value} = 0.00$)

Table 4.5.2 revealed the results of linear regression analysis on influence of principals' resources management on level of teachers' job productivity in senior secondary schools in Adamawa State. The results showed adjusted $R^2 = 0.521$, $F = 258.086$, $p\text{-value} = 0.000$. This showed that about 52% of variation in the teachers' job productivity can be explained by the dependent variable. More so, the coefficients $\beta = 0.723$, $t = 8.149$, $p\text{-value} = 0.00$, suggested that principals' resources management significantly influence teachers' job productivity by about 72%.

Hypothesis Three: There is no significant effect of time management by principal on level of teachers' job productivity in senior secondary schools in Adamawa State

Table 4.5.3: Regression Analysis on Influence of Time Management by Principal on Level of Teachers' Job Productivity in Senior Secondary Schools in Adamawa State

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.426	.939		8.977	.000
	Principals' Time Management	.386	.076	.379	5.046	.000

a. Dependent Variable: Teachers' Job Productivity

Adjusted $R^2 = .138$, ANOVA ($F = 25.462$, $df (1, 152)$, $p\text{-value} = 0.00$)

The results on Table 4.5.3 revealed the results of linear regression analysis on influence of outsourcing warehousing by manufacturing firm in south west Nigeria on efficiency business supply chain. The results showed adjusted $R^2 = 0.138$, $F = 25.462$, $p\text{-value} = 0.000$. This showed that about 14% of variation in the teachers' job productivity can be explained by the dependent variable. More so, the coefficients $\beta = 0.379$, $t = 5.046$, $p\text{-value} = 0.00$, suggested that ordering outsourcing is significantly influencing reduction in operational and project management cost by about 38%.

Discussion

The results from this study show that principals' school supervision effectively influenced teachers job productivity. It was specifically shown that 30% of variation in teachers' job productivity can be explained by principal school supervision efficiency. This shows that monitoring activities by principal position teachers in the effective working conditions. This concurs with the earlier works by Vickery et al. (2019) and Michael (2019) that



principal as school-based supervisor significantly promote teachers' effectiveness. Similarly, Kwang et al. (2019) found that school with highly effective principal supervision have teachers with up-to-date activities. Balogun (2015) has found direct effect of principal on teachers' commitment and dedication. Also, the current finding is in accordance with the conclusion drawn by Elmore (2017) that principal roles as supervisor and the efficiency put into supervision represent teachers' seriousness and dedication toward their job both curricular and extra-curricular responsibility. Ayeni and Akinola (2018) established that weak principal supervision accounted for not less than 30 – 40% teachers' underperformance at school and about 10 – 25% poor students' achievement in the school. Mohammed and Omar (2019) found that the rate a principal could supervise his/her teachers on lesson note, lesson delivery, classroom management, and other outdoor activities determine the expected commitment on the part of the teachers which accounted for their job productivity. Michael (2019) established that principal with poor supervision is anti-productivity to the teachers, due to the fact that teachers could be in dark of either doing right thing or wrong. Effective supervision allows for immediate correction and prevent pile-up of errors in the process.

This study shows that principal resources management significantly promote teachers job productivity. This could be as result of the fact that educational resources such as teaching aids, learning facilities, and other school resources are usually limited which demand for principal competency to control them for effective result on the overall school activities. Thus, the study shows that principal resources management could account for about 52% of variation in the teachers' job productivity. This emphasized the importance of learning resources toward teaching and learning. This finding is in accordance with earlier finding by Olagboye (2019) and Ayeni (2017) that school resources significantly promote teachers job performance. Likewise, Abdikadir (2018) found that principal competency in resources management directly influence overall teachers working rate and learners' academic gain. Similar conclusion was reached by George (2019) that sharing of scarce resources is as important as hiring the services of competent teachers. This show the relevancy of principal supervisory efficiency in teachers' job productivity. Above all, having competency of sharing and managing resources could define the life span of such resources and its overall contribution toward teaching and learning activities within school, which can further define teachers' job productivity.

The findings from this study showed that principal time management significantly promote teachers job productivity. This may not be unconnected with the fact that school activities are based on time frame, the lesson period for the subject, the opening and closing of school among others school activities are all time bound. Therefore, teachers need to work within the frame of given time, which can affect the overall job productivity. Time is everything that happen within the school therefore, teachers need to comply with time arrangement. This finding buttressed the earlier finding by Obi and Ogbuagu (2020) that time management account for about 30% of work success rate in organization. This



is due to the fact that there are many activities within shorted possible time and there seems to be lesser time for everything. Therefore, only those employees know how to manage time excel in their overall working rate. In school, principal that take lots of time for teachers' briefings or taking all time for decisions making could force his/her teacher to skip job and abandon classroom lesson. Kingi (2018) found that poor time management directly accounted for underperformance among teachers. Similarly, Abdikadir (2018) found direct relationship between principal's time consciousness and teachers working rate. Also, Obi and Ogbuagu (2020) and Whippe (2021) established that principal time consciousness accounted for teachers' punctuality, and classroom attendant. Though, Olagboye (2019) found that some teachers are independent of principal time consciousness as they performed better without principal supervision. However, they concluded that such scenario is not sustainable as teachers under such principal with laissez-faire leadership styles could decide to squeeze all their lesson into odd period, while others may absence from classroom. Time management is important to school achievement since entire school programe count on school calendar.

Conclusion

This study through its finding has established that principal supervision competency significantly influenced teachers' job productivity in senior secondary school in Adamawa State. Also, this study has reiterated the fact that principal resources management competency accounted for teachers' job productivity in the senior secondary school in Adamawa State. This shows the relevance of resources to teachers' job performance especially in secondary education level. This study through its findings has also showed that time management competency of principal affected teachers' job productivity. The study emphasized that paying attention toward time and events at school allow for teachers to be more productive

Recommendations

1. The Adamawa State Post Primary Board should embark on training on school supervision for the secondary school principals to further enhance their role as school based supervisor
2. Principals in the secondary schools in Adamawa State should show more dedication toward resource allocation and maintenance, to ensure that teachers get enough resources for their tasks and job productivity
3. Principal in the secondary schools in Adamawa State should attach more importance to time management in order to encourage more job productivity among their teachers

REFERENCES

- Abdikadir, I. F. (2018). School management: Characteristics of effective principal, *Global Journal of Human Social Science*, 3(13), 23 – 33
- Ahmad, J. (2017). Effect of capacity building on teachers' efficiency in service delivery in Al-Ghubar, Oman. *Journal of Research in Science Teaching*, 37(9), 1019–1041.
- Ahmed, R. & Mohamad, N. (2016). Differentiating between leadership competencies and styles: A critical review in project management perspective. *International Journal of Information Technology Project Management*, 1(3), 20 – 36



- Alimba, C. N. (2018). *Conflict variables as correlates of public secondary school teachers' productivity in Adamawa state, Nigeria*. Unpublished Phd Thesis, University of Ibadan.
- Awodoyin, F. O. (2012). *Relationship between school environment and students' academic achievement in senior secondary schools in Adamawa State*. Department of Science Education. M.Tech Thesis Federal University of Technology Yola. Adamawa State.
- Ayeni, A. J. & Akinola, O. B. (2018). Influence of principals' leadership styles and motivation of teachers on quality assurance in secondary school: A case study of Ondo State. *Ife Journal of Theory and Research in Education*, 2(1&2), 162-170.
- Ayeni, A. J. (2017). *Teachers' instructional task performance and principals' supervisory roles as correlates of quality assurance in secondary schools in Ondo State*. Unpublished doctoral dissertation, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Bahr, C., Kinzer, C. K., & Rieth, H. (2013). An analysis of the effects of teacher training and student grouping on reading comprehension skills among mildly handicapped high school students using computer-assisted instruction. *Journal of Special Education Technology* 11(3), 136-154.
- Balogun, T. A. (2015). Improvisation of science teaching equipment. *Journal of the Science Teachers Association*, 20(2), 72-76.
- Boyd, V. & Hord S. M. (2016). Schools as learning communities. Issues about Change, *Journal of Contemporary Research*, 4(1), 1- 8.
- Craig, C. J., Richard, J. K. & du-Plessis, J. (2018). Teacher development: Making an impact. *Innovative Education & Research*, 2(1),7 - 15.
- Ekpenyong, E. E., Okon, E. A. & Imo, M. O. (2018). The influence of in-service training, seminars and workshops attendance by social studies teachers on academic performance of students in junior secondary schools in cross River State, Nigeria. *Journal of Education and Practice*, 7(22),63 - 75.
- Elmore, R. F. (2017). Investing in teacher learning: Staff development and instructional improvement in community school. *Journal of Research in Science Teaching*, 37(9), 1019-1041.
- Emetaron, V. G. (2015). The retraining and utilization of educational administrators and planners in Nigeria. *Qualitative Education Management*, 1(3),122-128.
- Eze, T. 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*, 4(3), 33-37.
- Ezeani, N. E & Oladele, R. (2016). Implications of training and development programmes on teachers productivity in secondary schools in Onitsha, Anambra State, Nigeria. *International Journal of Asian Social Science*, 3(1), 266-281.
- George, S.K. (2019). *Impact of teacher training and student's performance among the Kenyan secondary schools in Narok County*. Unpublished MSc University of Nairobi.
- Kingi, P.M. (2018). Challenges facing board of managers in management of public secondary schools; Kamwangi District, Kenya. *Journal of Education* 3(9), 285-291.
- Kwang, S.Y., Duncan, T., Silvia, W., Scarloss, B. & Shapley, K. L. (2019). Reviewing the evidence on how teacher professional development affects student achievement. *Advanced Regional Education Research*, 3(9),23 - 32.
- Liu, S. H & Tsai, H. C. (2017). Teachers' experience of collaborating in school teaching teams. *Asian Social Science*; 13(2),159-168.
- Maigeri, H. (2018). *Impact of the Adamawa state universal basic education board (ASUBEB) on the development of nomadic education in Adamawa State*. Unpublished MED. Adamawa State University, Mubi, Nigeria.
- Michael, F. (2019). The Role of The principal in school reform, Ontario Institute for Studies in Education University of Toronto.
- Mohammed, Z. C. & Omar, C. (2019). The need for in-service and capacity building training for teachers and their effectiveness in Nigerian secondary school. *International Journal for Innovation Education and Research*, 2(3),47 - 56.
- Obi, C. E. & Ogbuagu, I. G. (2020). Management of resources for the improvement of secondary school education in Rivers State. *Business and Management*, 7(07),01 - 07.
- Olagboye, A. A. (2019). Principals/Vice-principals attitude to training and selection criteria. *Journal of Educational Planning and Administration*. 2(1), 88-98.
- Olushola, M. A. (2021). Management deficit in Nigerian schools. *Nigeria Educational Management*. 2(7)20-28.
- Scott A. I. & Michael, F. L. (2018). Incentive strength and teacher productivity: evidence from a group-based teacher incentive pay system. *International Journal of*, 2(9), 34 - 55.
- Vickery, S., Droge, C. & Germain, R. (2019). The relationship between productivity and time management in organization structure. *Operations Management*, 2(1):34 - 56.
- Whipper, J. (2021). Time management and job accomplishment, *Journal of Institute of Sport*. 30(4), 7-12.
- Yusuf, M. O. & Yusuf, H. T. (2013). Educational reforms in Nigeria: The potentials of information and communication technology. *Educational Research*, 4(5),225 - 230.