ABSTRACT
Principals’ administrative efficiency is very imperative to the school system, and a lack of it would lead to inefficiency and could reduce productivity on the part of the teachers. Over time, stakeholders in the educational industry, particularly at the secondary level, have complained about low teacher productivity, which is reflected in students’ academic achievement. It is not possible to conclude that low teacher productivity is due to administrative inefficiency, which is why this study must be empirically conducted. This study determined administrative efficiencies and teacher productivity in Delta State secondary schools, Nigeria. Three research questions and hypotheses gave the study a direction. The study adopted the ex-post facto design of the correlational survey method. The population for the study consists of 13,531 principals and teachers in government secondary schools in Delta State, comprising of 467 secondary school principals and 13,064 secondary school teachers in Delta State. A stratified sampling procedure was used to sample 862 principals and teachers in secondary schools. The instrument used for data collection was a structured questionnaire on Administrative Efficiencies Questionnaire (AEQ) and Teachers Productivity Questionnaire (TPQ), which was used to gather information from respondents. Research questions were answered with a mean score and coefficient of determination, Pearson Product Moment Correlation Statistics was used to test all hypotheses with a significance level of 0.05. Findings show that administrative efficiencies, principals’ commitment to work, and effective management of teaching facilities predict teachers’ productivity in Delta State secondary schools. It was recommended, among others, that effective management of teaching facilities determines teachers’ productivity. There is a need for principals in Delta State secondary schools through the ministry of education to make teaching facilities available for teachers’ use.
1. INTRODUCTION

Education is Nigeria's largest corporation and serves as a weapon for academic advancement, social mobilization, political survival, and effective national development. The importance of secondary education to young people cannot be overstated. This is where solid foundations for the individual's continuous training are intended to be laid. The ultimate purpose of education at all levels is to promote inclusive, high-quality, relevant, and accessible education for self-sufficiency. This is motivated by the belief that good education contributes significantly to economic growth, greater job chances, and income-generating opportunities for long-term development. To attain the intended outcomes, effective secondary education management is required [1]. The administration and management in school are needs to assumption and support of companies [2]. A priority is ensuring fair access and enhancing the quality and efficacy of education at all levels. There is a designated administrator in any formal organization who is as significant as the organization itself. The school administrator's quality is a unique component to consider when assessing the success or failure of any institution, such as a school. To put it another way, the administrator manages financial, human, and material resources in order to attain the stated goals. However, while organizations (such as schools) regard job productivity in terms of output, the teachers who comprise the workforce in achieving organizational goals must be first considered, such that their employment ambitions and objectives may not be abandoned. As a result, the administrator must be communicative and transactional when dealing with these two phenomena: school organization and personnel. A school's principal is a planner, director, controller, coordinator, organizer, adviser, and problem-solver [3]. He determines and sets the school's goals and objectives, which must, of course, be consistent with national goals; analyzes tasks; and assigns responsibility to the personnel based on specialization and expertise [4]. The spiritual tasks of teachers can support the thinking of students especially of higher order thinking skills-oriented learning [5].

To achieve improved education administration, a competent principal should support quality assurance in his or her school. A principal's primary responsibility is to create an environment that allows teachers to make desired changes in students' learning [6]. Principals can motivate teachers to be more productive by recognizing their needs and working to meet them. Principals' administrative efficacy is demonstrated in their operations, allowing them to be recognized as group leaders. The principal as an administrator pushes personnel to use their creativity and initiative as needed in making contributions toward the achievement of institutional goals. Principals play an essential role in maintaining school discipline both via competent administration and by personal example aimed at ensuring teacher productivity. Babalola [7] discovered a link between teacher productivity and principal administrative efficacy when it came to school disciplinary policy.

Planning, organizing, supervising, staffing, assessing, coordinating, leadership, and acquiring and maintaining instructional materials, equipment, and buildings are among the administrative duties that principals are expected to accomplish. Karim et al. [8] argue that the new style of leader is who are aware the aspect of ethic and ethnic. Principals are also responsible for overseeing the school's finances, as well as maintaining staff and student discipline. The extent to which principals conduct the foregoing administrative responsibilities effectively determines their efficacy as administrators of their schools. Administrative efficiency emphasizes how administrators are likely to lead and realize the full capacities of staff in educational organizations, as well as teacher inspiration, competence, dedication, and student satisfaction [9]. Administrators must recognize that educational failure is a problem and a waste to a nation, and that competent administration is the final procedure for bringing about change in educational system.

Dinham [10] used performance management to demonstrate administrative efficacy, which translates to "trying to infuse quality management principles and moving toward an emphasis on results or value for money." When it comes to the question of performance in terms of social service delivery in Nigeria, this assumption does not appear to approximate or explain the situation. To achieve this, deliberate and well-focused initiatives are required in order to achieve sustainable development. The importance of productivity in any organization cannot be overstated. The author goes on to describe an employee's productivity as the
relationship between units of labour input and units of output, or the efficiency with which factors of production are used to produce goods and services [11]. The leader's program in school can affect the students' values [12]. Value of input cost of output, or simply put, value of input over the cost of production, is a connection between input and output. Productivity is defined as the output that results from a given resource input at a given time. In terms of measuring productivity in the public sector, there is a conundrum as to how productivity can be measured in a sector where public services are generally provided without charge, making it impossible to measure the concept using prices associated with services provided, as is the case with government sector organizations. In the school system, teachers productivity is usually measured in different dimension, such as ability of a teachers to cover the scheme for the term, adequate preparation of lesson, carry out responsibilities assigned by the principals, timely preparation of students result and most importantly students’ academic achievement. Educational input in this regard is the teacher while the output is the number of students who have achieved success.

Afianmagbon [13] did a study in Pakistan on the application and analysis of total quality management in colleges of education, and the results revealed that the quality of education in Pakistan is low owing to inadequate principal management. The quality of administration and infrastructure in the public sector and schools is deteriorating due to a lack of dedication or inexperienced administrators, as well as a limited budget. According to the findings, effective communication may be developed for effective management in order to increase educational quality. In a study of the impact of administrative efficiencies on secondary school performance in Benue State, Akemolafekwu [14] discovered that total commitment, adequate funding, and quality instructional supervision, as well as quality school facilities and effective communication, all have a significant impact on secondary school performance.

In order to provide a high-quality education, full commitment in school management can boost teacher productivity, encourage and reassure effective staff engagement, and improve organizational outcomes. School principals should continue their role as facilitators in the implementation of administrative efficiency and welcome all employees, professional and ancillary, as partners in achieving a common goal. Principals must be willing to sacrifice time and, in some cases, money in order to achieve the school's intended success. Holzer [15], revealed that “successful leaders retain an assertiveness of sacrifice to turn around organizations.” Principals must be willing to go above and beyond to get to the next level. Qodriah et al. [16] argue that self-leadership and career success of principals will become the motivation for students in the school. Principals (leaders) sometimes become agents and improve school management in order to develop an efficient school administration. Teaching is a complex process with many factors influencing instructional quality and learning, one of which is the teacher's work environment. Teachers around Nigeria appear to be sneering because of the terrible working environment, which manifests itself in poor service conditions. Classrooms in Nigerian schools are ill-equipped with the required amenities. Several teachers have been teaching for years without receiving any kind of retraining or professional development to keep their skills and approaches up to date. Most private schools have poor organizational climates when compared to government schools, and it is part of the principal's responsibility to maintain an adequate teaching and learning environment [17]. Organizational climates, according to Ukeje (2000), are linked to productivity in terms of interpersonal relations, group cohesiveness, and job participation. General opinion of the workplace has a significant impact on employee productivity. When the principal is devoted to providing a good atmosphere for teaching and learning, a healthy organizational climate can be defined as one that supports high productivity, low tension, and high morale [18].

Good administration begins with the creation of a mission statement, which is followed by the formulation of a strategy, which is then translated into action plans that are implemented throughout the organization or institution. Principals become committed to setting the goals, values, and systems that guide the pursuit of continuous performance and improvement as leaders when they use effective management, which can influence teacher productivity [17]. Issifu and Adinan [19], stressed that entire commitment by the principal is highly crucial for teachers to be productive, as both the leader and subordinates are expected to display total dedication to the corporate vision and mission. From senior management down to the teaching
and non-teaching employees, it is a primary function. Facilities are important inputs in educational institutions because they foster a positive learning environment, encourage interaction, and assist students in achieving their educational objectives [20]. In essence, if essential facilities are not given in acceptable quality and quantity at appropriate times through the principal's administrative finesse, the school curriculum will be meaningless and ineffective [21]. Effective facilities management, necessitates knowledge, competency, and expertise in handling several aspects of the school system [21]. The above necessitates the principal's competence to set required objectives, supervise facility utilization, formulate procurement strategies, and ensure actual management and supervision of available facilities in order to achieve the school system's set goals. Principal's role in educational facility management comprises bringing together individuals to form a group that will govern, organize, and articulate actions in order to achieve concrete and holistic learning for the benefit of society as a whole [22].

1.1 Statement of the Problem

In Nigerian society, the seeming lack of administrative efficacy of principals is an annoying issue. When this occurs in the school, it leads to inefficiency and low staff productivity. One of the issues that the educational system has always had to deal with is how to certify that the teaching and learning excellence, as well as administration, is maintained. However, despite the efforts to keep teachers happy in their jobs, productivity appears to be low. Administrative inefficiencies, such as insufficient facilities for actual teaching and learning, poor or non-maintenance of existing ones, lack of commitment by principals, lack of teamwork, poor communication methods, inadequate funding, supervisory skills used by principals during teaching and learning, and leadership styles, among others, can all contribute to this shortfall. Because administrative efficacy has such a big impact on educational outcomes, it's important to figure out what kind of administrative efficacy principals have in secondary schools. As a result, the research aim is to determine administrative efficiencies and teacher productivity in Delta State secondary schools.

1.2 Hypotheses

The following null hypotheses were formulated:

1. Relationship between administrative efficiencies and teacher productivity is not significant.
2. Relationship between principals’ commitment to work and teachers' productivity is not significant.
3. Relationship between effective management of teaching facilities and teacher productivity is not significant.

2. METHODOLOGY

The research aim is to determine administrative efficiencies and teacher productivity in Delta State secondary schools. The correlational survey approach was used in this study with an ex-post facto design. The population for the study consists of 13,531 principals and teachers in government secondary schools in Delta State comprising of 467 secondary school principals and 13,064 secondary school teachers in Delta state. A total of 862 secondary school principals and teachers in government secondary schools were sampled using a stratified sampling technique. The instrument used for data collection was a structured questionnaire on Administrative Efficiencies Questionnaire (AEQ) and Teachers Productivity Questionnaire (TPQ) which was used to gather information from respondents. Face and content validity were used to validate the instrument using expert judgment. The instrument's reliability was tested using the Cronbach Alpha method, which was used to determine the items’ internal consistency, and coefficients of .75 and .81 index for Administrative Efficiencies Questionnaire (AEQ) and Teachers Productivity Questionnaire (TPQ) respectively were obtained indicating a high index. To answer the study questions, the data was evaluated using descriptive statistics such as mean, standard deviation and coefficient of determination. All hypotheses were tested at the 0.05 level of significance using Pearson Product Moment Correlation Statistics.

2.1 Presentation of Results

Research Question 1: What is the relationship between administrative efficiencies and teachers productivity in Delta State government secondary schools?
Data in Table 1 shows mean score and standard deviation analysis on administrative efficiencies and teachers’ productivity. The result revealed administrative efficiencies with mean score of 21.89, SD of 4.33 and teachers productivity with mean score of 26.91, SD of 3.80. The relationship between administrative efficiencies and teachers productivity is .72 which revealed a positive relationship. \( r^2 \) value of .52 shows that administrative efficiencies determines teachers productivity by 52%.

**Research Question 2:** What is the relationship between principals’ commitment to work and teachers’ productivity in Delta State government secondary schools?

Data in Table 2 shows mean score and standard deviation analysis on principals’ commitment to work and teachers productivity. The result revealed principals’ commitment to work with mean score of 28.11, SD of 3.98 and teachers productivity with mean score of 26.91, SD of 3.80. The relationship between principals’ commitment to work and teachers productivity is .84 which revealed a positive relationship. \( r^2 \) value of .71 shows that principals’ commitment to work determines teachers productivity by 71%.

**Research Question 3:** What is the relationship between effective management of teaching facilities and teachers productivity in Delta State government secondary schools?

Data in Table 3 shows mean score and standard deviation analysis on effective management of teaching facilities and teachers productivity. The result revealed effective management of teaching facilities with mean score of 21.22, SD of 3.41 and teachers productivity with mean score of 26.91, SD of 3.80. The relationship between effective management of teaching facilities and teachers productivity is .71 which revealed a positive relationship. \( r^2 \) value of .71 shows that effective management of teaching facilities determines teachers productivity by 50%.

**Hypothesis 1:** There is no significant relationship between administrative efficiencies and teachers productivity in Delta State government secondary schools.

**Table 4. Pearson (r) Analysis on administrative efficiencies and teachers productivity**

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<th>Teachers productivity</th>
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<tr>
<td>Teachers productivity</td>
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*. Correlation is significant at the 0.05 level (2-tailed)
Table 5. Pearson (r) Analysis on principals’ commitment to work and teachers productivity

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* Correlation is significant at the 0.05 level (2-tailed)

Table 6. Pearson (r) Analysis on effective management of teaching facilities and teachers productivity

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* Correlation is significant at the 0.05 level (2-tailed)

Table 4 above shows the relationship between administrative efficiencies and teachers productivity with r value of .721 and significance P = .264. Therefore, the null hypothesis which states that there is no significant relationship between administrative efficiencies and teachers productivity in Delta State government secondary schools was rejected. Thus, there is a significant relationship between administrative efficiencies and teachers productivity in Delta State government secondary schools.

**Hypothesis 2:** There is no significant relationship between principals’ commitment to work and teachers productivity in Delta State government secondary schools.

Table 5 above shows relationship principals’ commitment to work and teachers productivity with r value of .843 and significance P=.271. Therefore, the null hypothesis which states that there is no significant relationship between principals’ commitment to work and teachers productivity in Delta State government secondary schools was rejected. Thus, there is a significant relationship between principals’ commitment to work and teachers productivity in Delta State government secondary schools.

**Hypothesis 3:** There is no significant relationship between effective management of teaching facilities and teachers productivity in Delta State government secondary schools.

Table 6 above shows relationship effective management of teaching facilities and teachers productivity with r value of .714 and significance P=.346. Therefore, the null hypothesis which states that there is no significant relationship between effective management of teaching facilities and teachers productivity in Delta State government secondary schools was rejected. Thus, there is a significant relationship between effective management of teaching facilities and teachers productivity in Delta State government secondary schools.

**3. DISCUSSION OF RESULTS**

According to the findings, in Delta State government secondary schools, there is a significant relationship between administrative efficiencies and teachers productivity. This finding shows that with adequate administrative efficiencies, teachers’ productivity would improve by 52%. This study backs up Janz and Prasarnphanich’s [23] assertion that the principle as an administrator pushes workers to use their creativity and initiative while making contributions to help the institution achieve its goals. In the same vain Babalola [7] revealed that teachers' productivity with the school discipline policy was
linked to the principal's administrative efficacy. Also, Afianmagbon [13], found that in Pakistani, education is of poor quality due to bad principal management. The quality of administration and infrastructure in the public sector and schools is deteriorating due to a lack of dedication or inexperienced administrators, as well as a limited budget. According to the findings, effective communication may be developed for effective management in order to increase educational quality but principals neglect this. Furthermore, Akemolafekwu [14], revealed that total commitment, enough money, and excellent instructional supervision, quality school facilities, and effective communication have a substantial impact on secondary school teachers' success.

The findings reveal that in Delta State government secondary schools, there is a substantial association between the principal's commitment to work and teachers' job productivity. This finding has proven that principal who is regular to school and committed to their job would enhance teachers' job productivity. This research backs up Isola's [17] findings that good administration begins with the creation of a mission statement, which is followed by a strategy that is translated into action plans that are implemented throughout the school. Also, the finding is linked to Ukeje (2000), discovery that productivity in terms of interpersonal relations, group cohesiveness, and job participation. Issifu and Adinan [19], entire commitment by the principals is highly crucial for teachers to be productive since both the leader and the subordinates are required to display total dedication to the organizational vision and goal.

According to the findings, in Delta State government secondary schools, there is a substantial relationship between effective management of teaching facilities and teacher productivity. The finding shows that when teachers are assured that teaching/learning facilities are in good conditions their productivity would be improved by 50%. This discovery lends support to James and Daniel [22], the principal's role in educational facility management comprises bringing together individuals to form a group that will govern, organize, and articulate actions in order to achieve concrete and holistic learning for the benefit of society as a whole. In another discovery, Jagero [24], found that school management by principals is the sum of all efforts made in the provision and delivery of education to ensure that both human and material resources given to education are used to their maximum potential in the achievement of educational objectives and goals. To face contemporary social issues, the school management team, led by the principle, must develop, support, and equip employees with the knowledge and skills necessary to respond positively to the ever-changing phenomenon of education. Aduke [25], in order to achieve this, educational facilities must be continuously increased and adequacy must be maintained, as existing ones are often overburdened, badly maintained, and unable to give and promote desirable, innovative, and harmonious problem-solving skills.

4. CONCLUSION

Teachers' productivity in Delta State government secondary schools is determined by administrative efficiencies, such as the principal's commitment to work and effective administration of teaching facilities. It implies that schools where principals display high administrative efficiencies particularly commitment to work and maintenance of instructional facilities, teachers would aspire to be in school daily and impart knowledge to the students. In turn, these students would achieve greater height academically, thereby proving the productiveness of the teachers. As a result, it was suggested that Delta State secondary school principals should consider their administrative efficacies as a source of teacher productivity. Secondary school principals in Delta State should be devoted to improving teacher productivity. Effective management of teaching facilities determines teachers productivity, thus there is need for principals in Delta State secondary schools through ministry of education to make teaching facilities available for teachers use.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Author has declared that no competing interests exist.
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20. Kirkpatrick SA, Locke EA. Direct and indirect effects of three core charismatic


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