

Principals' Administrative Effectiveness and Students' Academic Performance in Public Senior Secondary Schools in South West Nigeria: A Correlational Analysis

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Abstract

This study investigated principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria. Four research questions and four null hypotheses guided the study. The study adopted correlational survey and ex-post facto research designs. From a target population of 134 public senior secondary schools and 7,412 teachers, a sample size of 67 public senior secondary schools and 364 teachers was drawn from Ondo, Osun, and Ogun States using a multistage sampling procedure. A researcher-developed instrument titled Principals' Administrative Effectiveness Questionnaire (PAEQ) and a Students' Academic Performance Proforma (SAPP) were used for data collection. The reliability coefficient of 0.83 was obtained for the PAEQ using the split-half method, Pearson Product Moment Correlation, and Spearman Brown Prophecy Formula. Mean scores and standard deviations were used to answer research questions, while linear and multiple regression analyses were employed to test the null hypotheses at a 0.05 alpha level. The findings revealed that principals were effective in the administration of curriculum and instruction, school plant and facilities, and student personnel; and that students' academic performance showed a good trend in SSCE results from 2013 to

2022. The study concluded that principals' administrative effectiveness significantly influences students' academic performance in public senior secondary schools in South West, Nigeria. It was therefore recommended that school principals should intensify administrative efforts towards structuring students' learning activities to align with academic goals and expected outcomes in external examinations. Furthermore, principals should collaborate with State Post Primary Education Boards in Ondo, Osun, and Ogun States to ensure the adequate provision and maintenance of school plants and facilities to enhance the teaching-learning process and improve overall academic performance in public senior secondary schools.

Keywords:

Principals' Administrative Effectiveness, Instructional Leadership, School Management, Educational Administration, Students' Academic Performance, Public Secondary Schools, South West Nigeria

Introduction

Education remains a fundamental instrument for human capital formation and national development. It empowers individuals with knowledge, skills, values, and attitudes necessary for social, political, and economic transformation. As Mark (2013) observed,

education contributes to the moral, social, intellectual, and physical development of individuals and enhances their capacity to participate meaningfully in societal advancement. In recognition of this pivotal role, nations continue to invest substantially in education as a pathway to achieving sustainable development.

At the secondary education level, the National Policy on Education (Federal Republic of Nigeria [FRN], 2013) outlines the broad objectives as preparing individuals for useful living within society and for higher education. Achieving these goals depends largely on the administrative effectiveness of school principals, whose leadership determines the extent to which institutional goals are realized. The quality of secondary education therefore hinges on the competence, vision, and administrative efficiency of principals who coordinate teaching, learning, and overall school management processes.

The FRN (2013) articulates the objectives of secondary education to include: providing access for all primary school leavers; offering a diversified curriculum to accommodate varying talents and aspirations; preparing middle-level manpower in applied sciences and commerce; promoting Nigerian languages and culture; inspiring academic excellence; fostering national unity; and developing self-reliant citizens who respect the dignity of labour. The actualization of these objectives depends significantly on the administrative capacity of school principals to plan, organize, coordinate, and evaluate educational programmes effectively.

Effective administration in secondary schools is a critical factor for achieving educational quality. Hallinger and Heek (2016) emphasized that leadership in secondary schools begins with the principal, who serves as the pivot for ensuring administrative effectiveness. Similarly, Akinbode and Alshuhumi (2018) likened the

principal to the “captain of the ship,” responsible for steering the school toward its objectives. Principals have been described as strategic problem solvers, instructional leaders, managers, cultural mediators, and servant leaders (Sergiovanni, 2014; Moodly & Toni, 2015). Abdulrasheed and Bello (2015) further asserted that principals occupy a pivotal position in developing initiatives and managing the day-to-day affairs of schools.

Administrative effectiveness refers to the extent to which a school leader successfully translates institutional goals into measurable achievements. According to Akomolafe (2012), it encompasses decision-making, delegation, motivation, and supervision to ensure that teachers and students operate within a conducive learning environment. Similarly, Ere and Okon (2015) viewed administrative effectiveness as the ability of principals to accomplish set educational objectives through systematic practices, while Bottery (2016) identified it as the principal's capacity to align school activities with desired outcomes.

Empirical studies have shown that principals' administrative effectiveness can be examined through major task areas such as curriculum and instruction management, school plant and facilities administration, and student personnel administration. Eneh (2016) established that principals' administrative effectiveness significantly influences students' academic performance by ensuring a well-coordinated instructional process. Adeniyi and Akinola (2020) similarly found that effective principals foster academic excellence by managing curriculum delivery, providing adequate learning facilities, and motivating teachers and students toward high achievement.

These observations underscore the importance of administrative competence among school principals in ensuring optimal use of human and material resources for

effective teaching and learning. However, in the South West region of Nigeria, concerns have been raised by stakeholders regarding the declining trend in students' academic performance in the Senior School Certificate Examination (SSCE). This has prompted questions about the administrative capabilities of school principals in managing instructional programmes, maintaining school plants, and addressing student-related challenges.

Principals in the South West are expected to demonstrate strong leadership in planning instructional activities with subject teachers, introducing contemporary teaching techniques, ensuring regular maintenance of school facilities, managing students' disciplinary issues, and organizing guidance, counselling, and health services. Nonetheless, variations in administrative effectiveness among principals may account for the differences in students' academic outcomes across schools.

Students' academic performance remains a major indicator of school effectiveness and educational quality. According to Kiamba, Mutwa, and Mulwa (2017), academic performance reflects the extent to which learners have acquired knowledge, skills, and attitudes as measured through assessments and examinations. Unfortunately, in Nigeria, the performance of secondary school students in public examinations—particularly the West African Senior School Certificate Examination (WASSCE)—has been persistently below expectations.

National performance statistics between 2014 and 2021, as reported by the West African Examinations Council (WAEC), revealed that only about 55.86% of candidates obtained five credit passes including English Language and Mathematics, leaving a shortfall of 44.14% (WAEC Chief Examiner's Report, 2014–2021). This trend is particularly worrisome

in the South West states—Ekiti, Lagos, Ogun, Ondo, Osun, and Oyo—where mean performance rates between 2014 and 2018 ranged from 33.42% to 57.47%, indicating significant performance gaps (WAEC Statistics, 2019).

Given these trends, the academic performance of students in South West Nigeria appears to be closely linked to the administrative effectiveness of their school principals. If principals effectively manage curriculum and instruction, school facilities, and student-related services, students' academic performance is likely to improve significantly. Hence, understanding this relationship is crucial for developing policies and strategies aimed at improving learning outcomes in public secondary schools.

It is against this backdrop that this study examined principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria.

Statement of the Problem

Despite the enormous investments by federal and state governments in secondary education, students' academic performance in public examinations such as the WASSCE has remained unsatisfactory. In the South West, WAEC statistics from 2014 to 2018 indicated that only about 44.82% of students met the minimum benchmark of five credit passes including English Language and Mathematics, while 55.18% failed to meet this requirement. Furthermore, none of the South West states ranked among the top five performing states in Nigeria within the same period (WAEC, 2019).

This poor academic outcome has generated serious concern among education stakeholders, who suspect that inconsistencies in students' results may be linked to variations in principals' administrative effectiveness. Many

principals appear to face challenges in planning instructional activities, supervising teachers' use of instructional materials, enforcing discipline, maintaining school plants, and providing essential student services such as orientation, counselling, and healthcare.

Given these observations, the persistent decline in students' academic achievement in the South West calls for an empirical investigation into the extent to which principals' administrative effectiveness influences students' academic performance in public senior secondary schools.

Objectives of the Study

Specifically, the study seeks to:

1. Ascertain the effectiveness of principals in the administration of curriculum and instruction in public senior secondary schools in South West, Nigeria;
2. Determine the effectiveness of principals in the administration of school plant and facilities in public senior secondary schools in South West, Nigeria;
3. Establish the effectiveness of principals in the administration of student personnel in public senior secondary schools in South West, Nigeria;
4. Examine the trend in students' academic performance in SSCE results in public senior secondary schools in South West, Nigeria, from 2013 to 2022; and

Research Questions

The following research questions guided the study:

1. How effective are principals in the administration of curriculum and instruction in public senior secondary schools in South West, Nigeria?
2. How effective are principals in the administration of school plant and facilities in public senior secondary schools in South West, Nigeria?

3. How effective are principals in the administration of student personnel in public senior secondary schools in South West, Nigeria?

4. What is the trend in students' academic performance in SSCE results in public senior secondary schools in South West, Nigeria, from 2013 to 2022?

Hypotheses

The following null hypotheses were formulated and tested at the 0.05 level of significance:

H_01 : There is no significant relationship between the effectiveness of principals in the administration of curriculum and instruction and students' academic performance in public senior secondary schools in South West, Nigeria.

H_02 : There is no significant relationship between the effectiveness of principals in the administration of school plant and facilities and students' academic performance in public senior secondary schools in South West, Nigeria.

H_03 : There is no significant relationship between the effectiveness of principals in the administration of student personnel and students' academic performance in public senior secondary schools in South West, Nigeria.

H_04 : There is no significant relationship between principals' overall administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria.

Literature Review

Principals' Administrative Effectiveness

The effectiveness of school principals in administering school organizations is central to achieving educational goals. Administrative effectiveness involves the principal's ability to translate school objectives into measurable outcomes by optimally utilising human and material

resources, making decisions, delegating duties, modelling appropriate behaviour, and motivating staff and students (Bottery, 2016; Olorunsola & Belo, 2018; Akomolafe, 2012). It is the extent to which set goals of a school programme are accomplished through the principal's administrative practices (Ereh & Okon, 2015; Adeyemi & Ademilua, 2012; Ere & Okon, 2015). Principals therefore coordinate diverse social energies within the school to operate as a unified organisation (Besong, 2014). For this study, principals' administrative effectiveness denotes the extent to which objectives related to curriculum and instruction, school plant and facilities, and student affairs are realised through principals' administrative practices in public senior secondary schools in South West Nigeria.

Principals' Administrative Task Areas

Research identifies several core administrative task areas for principals—personnel, students, finance, curriculum and instruction, school plant and facilities, and community relations (Ike, 2015; Kadir, 2017; Ndambuki, 2021; Nwamara & Igwe, 2023; Wahab & Mustapha, 2020). This study focuses on three: curriculum and instructional leadership, school plant and facilities administration, and student personnel administration.

Curriculum and Instructional Leadership

Effective curriculum and instructional leadership is fundamental to attaining secondary education goals. Curriculum encompasses academic content, objectives, approaches, resources, and assessment (Owan & Ekaette, 2019; Shao, 2012). Instructional leadership involves actions by principals that create a high-expectation climate, promote collaboration, concentrate staff time on direct instruction, support professional development, and supervise teaching to enhance student learning

(Berhane, 2012; Wahab & Mustapha, 2020; Lemonie et al., 2014; Ndambuki, 2021). Principals' instructional behaviours include setting clear goals, monitoring teaching and learning, providing feedback, and fostering conditions for higher learner outcomes (Sanchez & Watson, 2021; Hallinger & Murphy, 2013). In this study, curriculum and instructional leadership refers to principals' capacity to implement curriculum objectives and lead instructional activities effectively.

School Plant and Facilities Administration

School plant and facilities—buildings, laboratories, libraries, furniture, teaching aids, and related equipment—are vital for cognitive, affective, and psychomotor development (Auta, 2012; Aloga, 2014). Effective administration requires planning for procurement, appropriate utilisation, regular maintenance, and security of these resources (Kalagbor, 2017; Ninikanwa, 2014; Badamasi & Mohammed, 2019; Jimoh, Akintosotu & Ojo-Maliki, 2017; Ike, 2015; Nwamara & Igwe, 2023). Principals who manage procurement, ensure readiness and correct use, schedule maintenance, and protect facilities create conducive learning environments that facilitate teaching and learning.

Student Personnel Administration

Student personnel administration covers programmes and services that support student adjustment, welfare and development beyond classroom instruction (Kadir, 2017; Owan & Ekaette, 2019; Okonkwo & Obineli, 2013). It includes guidance and counselling (educational, vocational, personal-social), orientation for new students, health services, co-curricular activities, placement and follow-up, and discipline management (Owan & Ekaette, 2019; Kadir, 2017). Effective student

personnel administration helps students adjust, develop self-knowledge, and engage productively in school life, thereby supporting overall educational objectives.

Students' Academic Performance

Students' academic performance—of critical interest to educators, parents, and policymakers—refers to the knowledge, skills and competencies learners acquire and the grades or scores they attain in assessments and examinations (Nonyelum, Ogugua & Abah, 2022; Kumar, Agarwal & Agarwal, 2021; Richardson, Abraham & Bond, 2012). It results from interacting psychological, social and economic factors and is evidenced in class tests, continuous assessments, internal examinations, and external examinations such as WASSCE/SSCE (Diaz-Morales & Escribano, 2015; Sharm, 2012; Yusuf, Onifade & Bello, 2016; Narad & Abdullah, 2016; Olowo & Fashiku, 2019). Good academic performance signals better career prospects and institutional success, while poor performance denotes outcomes below expected standards as judged by evaluators (Narad & Abdullah, 2016; Dimkpa, 2015; Efe & Aderson, 2016; Orji, 2019). This study treats academic performance as both examination results and the demonstrated mastery of curriculum content that underpin critical thinking and lifelong learning (Omokhua & Agi, 2021).

Methodology

This study adopted a quantitative approach to investigate the relationship between principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria. The correlational survey and ex-post facto designs were employed. The correlational survey design was suitable because it examined the predictive relationship between naturally occurring

variables without manipulation (Cherry, 2022), while the ex-post facto design was used since students' performance records in the Senior School Certificate Examination (SSCE) had already been established prior to the study (Owan, Bassey & Ekpe, 2020). The target population comprised 134 public senior secondary schools and 7412 teachers across three South West states. Multistage sampling procedure was adopted. Three states—Ondo, Osun, and Ogun—were randomly selected to represent 50% of the region. Within each selected state, two education zones were chosen: Akure and Akoko North (Ondo), Oshogbo and Ife (Osun), and Abeokuta South and Ijebu North (Ogun). Using a simple random sampling method, 67 schools were drawn from a total of 134, representing 50% of the population in line with the recommendation of Mora (2019), who stated that using a 0.5 probability ensures maximum variability in sampling. Additionally, the Krejcie and Morgan (1970) table was used to determine the sample size of teachers.

A researcher-developed instrument titled Principals' Administrative Effectiveness Questionnaire (PAEQ) and a Students' Academic Performance Proforma (SAPP) were used for data collection. The PAEQ consisted of 24 items covering three key domains: curriculum and instructional leadership (8 items), school plant and facilities administration (8 items), and student personnel administration (8 items). Items were rated on a four-point Likert scale: Very Effective (VE), Effective (E), Fairly Effective (FE), and Ineffective (IE). The SAPP was designed to collect data on students' SSCE results from 2013 to 2022, categorised as follows: (i) five credits including English Language and Mathematics, (ii) five credits with either English or Mathematics, (iii) five credits without both subjects, and (iv) less than five credits or no credit.

The instruments were validated by two experts in Educational Management from the University of Abuja to ensure face and content validity. Reliability was established through a pilot test involving four principals and 24 teachers from schools not included in the study. Using the split-half method and Pearson Product Moment Correlation, reliability coefficients of 0.71 were obtained for the PAEQ. When adjusted with the Spearman Brown Prophecy Formula, the coefficient rose to 0.83, indicating high internal consistency (Olayiwola, 2012). The SAPP, being a secondary data collection tool, was not subjected to a reliability test as the SSCE results were already authenticated

Table 1:Analysis of Effectiveness of Principals in Administration of Curriculum and Instruction in Public

n = 364

S/N	Items: In my school, the principal	VE	E	FE	IE	\bar{x}	S.D	Decision
1	creates favourable climate for effective instruction	126	115	65	58	2.84	.74	Effective
2	promotes collaborative relationships among teachers towards achieving school goals	139	95	57	75	2.82	.76	Effective
3	encourages staff development programmes to promote teachers instructional competence	109	119	76	62	2.75	.79	Effective
4	sets high expectations to enhance students' learning	104	103	68	89	2.61	.90	Effective
5	delegates instructional roles to teachers to improve their performance	111	102	59	92	2.64	.88	Effective
6	meets welfare needs of teachers to motivate them to work	113	110	65	76	2.90	.72	Effective
7	monitors teachers' and students' performance and provides feedback	122	95	81	66	2.75	.80	Effective
8	observes what teachers teach and how they teach in relation to the school curriculum	100	108	93	63	2.67	.86	Effective
Section Mean/Standard Deviation						2.75	.81	Effective

The results of the analysis in Table 1 shows that all the items (1-8) had positive mean values ranging from 2.61 to 2.90. The section mean of 2.75 is greater than the criterion mean of 2.50 ,which implies that principals are effective in the administration of

by the West African Examinations Council (WAEC).

Data analysis involved both descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions, while linear and multiple regression analyses were employed to test the hypotheses at a 0.05 level of significance.

Data Analysis and Results

Research Question One

How effective are principals in administration of curriculum and instruction in public senior secondary schools in South West, Nigeria?

Senior Secondary Schools in South West, Nigeria

curriculum and instruction in public senior secondary schools in South West, Nigeria. Also, the results show that item 6 had the highest mean value of 2.90, while item 4 had the lowest mean value of 2.61 in the distribution of items mean values.

Research Question Two

How effective are principals in the administration of school plant and facilities in public senior secondary schools in South West, Nigeria

**Table 2:Analysis of Effectiveness of Principals in Administration of School Plant and Facilities in Public Senior Secondary Schools in South West, Nigeria
n = 364**

S/ N	Items: In my school, the principal	VE	E	FE	IE	\bar{x}	S.D	Decision
9	allocates school plant and facilities for instructional activities	112	117	63	72	2.74	.81	Effective
10	procures functional school plant and facilities	101	115	60	88	2.63	.90	Effective
11	ensures adequate utilization of school plant and facilities for instructional activities	96	140	52	76	2.70	.86	Effective
12	plans for the purchase of furniture and equipment	105	109	76	74	2.67	.88	Effective
13	secures available school plant and facilities from destruction and theft	129	91	67	77	2.74	.80	Effective
14	ensuring school plant and facilities are in the best working conditions for use when due	120	105	76	63	2.77	.76	Effective
15	ensures school plant and facilities are adequately used for the purpose for which it is meant	114	111	69	70	2.74	.82	Effective
16	develops a time table for utilization of school plant and facilities	116	108	66	73	2.74	.81	Effective
Section Mean/Standard Deviation						2.72	.84	Effective

The result in Table 2 shows that all the items (9–16) had positive mean values ranging from 2.63 to 2.77. The section mean of 2.72 is higher than the decision rule of 2.50, which indicates that principals are effective in the administration of school plant and facilities in public senior secondary schools in South West, Nigeria. Also, the results show that item 14 had the highest mean value of 2.77, while item 10 had the lowest mean value of 2.63 in the distribution of items mean values.

Research Question Three

How effective are principals in the administration of student personnel in public senior secondary schools in South West, Nigeria?

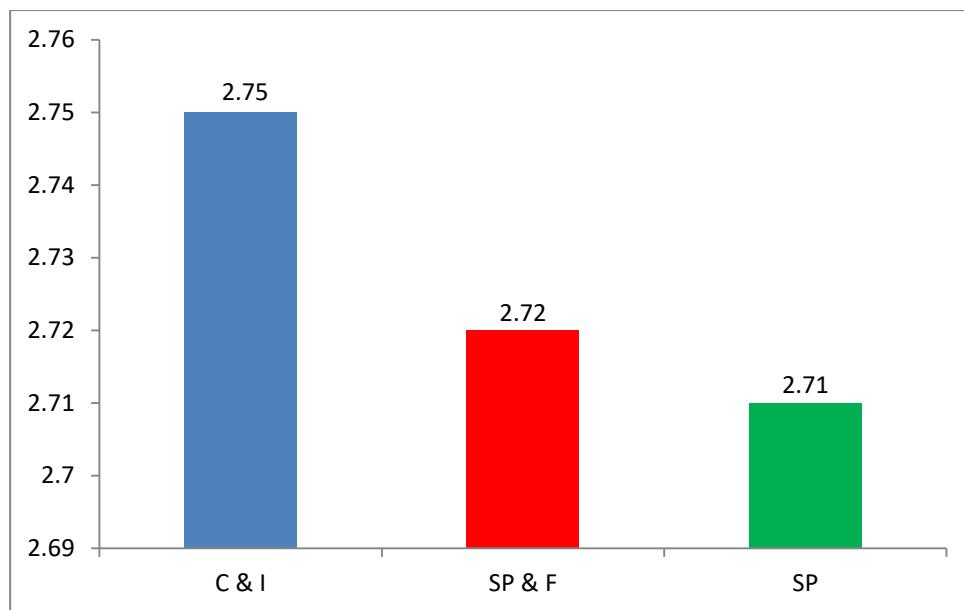
**Table 3:Analysis of Effectiveness of Principals in Administration of Student Personnel in PublicSenior Secondary Schools in South West, Nigeria
n = 364**

S/N	Items: In my school, the principal	VE	E	FE	IE	\bar{x}	S.D	Decision
17	provides orientation services for students	123	108	61	72	2.77	.77	Effective
18	provides guidance and counselling services for students	110	104	69	81	2.67	.89	Effective
19	provides healthcare services for students	125	111	64	64	2.82	.74	Effective
20	manages students' disciplinary problems	108	115	56	85	2.68	.85	Effective
21	provides boarding services for students	118	100	52	94	2.66	.87	Effective
22	handles students' records and progress report	122	105	50	87	2.72	.91	Effective
23	organizes social and outdoor activities for students' learning	99	227	86	62	2.70	.87	Effective

24	selection of new intakes	104	95	94	74	2.63	.86	Effective
	Section Mean/Standard Deviation					2.71	.85	Effective

The results of the analysis in Table 3 shows that all the items (17–24) had positive mean values ranging from 2.63 to 2.82. The section mean of 2.71 is greater than the criterion mean of 2.50. This implies that principals are effective in the administration

of student personnel in public senior secondary schools in South West, Nigeria. Also, the results show that item 19 had the highest mean value of 2.82, while item 24 had the lowest mean value of 2.63 in the distribution of items mean values.



Key: C & I Curriculum and Instruction
SP & FS School Plant and Facilities
SP Student Personnel

Figure 1:Mean Rank Order Distribution of Principals' Administrative Effectiveness Task Areas in Public Senior Secondary Schools in South West, Nigeria

Research Question Four

What is the trend in students' academic performance in SSCE in public senior

secondary schools in South West, Nigeria from 2013 to 2022?

Table 4:Analysis of Trend of Students' Academic Performance in SSCE Results in South West, Nigeria from 2013 to 2022

Year	No. of Candidates	4	3	2	1	\bar{x}	S.D	Decision

2013	58,985	13,874	15,613	12,692	16,806	2.45	1.05	Fairly performance	good
2014	59,874	12,708	15,404	15,573	16,189	2.41	1.07	Fairly performance	good
2015	58,263	21,946	16,587	11,272	8,458	2.90	.75	Good performance	
2016	61,352	20,521	18,645	9,364	12,822	2.76	.88	Good performance	
2017	63,467	22,789	21,786	8,436	10,456	2.90	.74	Good performance	
2018	65,881	21,697	20,821	12,545	12,818	2.81	.86	Good performance	
2019	66,355	24,509	17,943	11,638	12,265	2.82	.84	Good performance	
2020	67,909	30,421	17,765	10,727	8,994	3.03	.72	Very good performance	good
2021	67,742	29,875	18,987	11,814	7,066	3.06	.67	Very good performance	good
2022	69,936	32,368	17,581	10,903	9,084	3.05	.70	Very good performance	good
Total	639,762	230,708	181,132	114,964	112,958	2.82	.83	Good performance	
	(100.0%)	(36.1%)	(28.3%)	(17.96%)	(17.66%)				
Highest mean score = 3.06									
Average mean score = 2.82									
Lowest mean score = 2.41									

Table 4 presents the analysis of the trend in students' academic performance in SSCE results in South West, Nigeria from 2013 to 2022. The results of the analysis show that a total of 639,762 sat for the SSCE in the sampled public secondary schools in 2013 to 2022. Out of this number, 230,708 students (36.1%) had 5 credits and above including Mathematics and English Language; 181,132 students (28.3%) had 5 credits with either Mathematics or English Language; 114,964 students (17.96%) had 5 credits with neither Mathematics nor English

Language; while 112,958 students (17.66%) had less than 5 credits or no credit. As observed in the results, the highest mean academic performance of 3.06 was recorded in 2021, while the lowest mean academic performance of 2.41 was recorded in 2014. Cumulatively, from 2013 to 2022, the average mean academic performance for students was 2.82. This implies that there was a good performance in SSCE results in public senior secondary schools in South West, Nigeria, from 2013 to 2022.

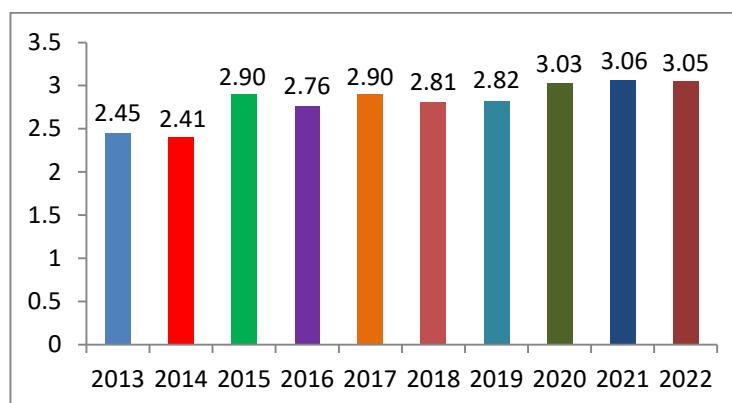




Figure2:Mean Score Distribution of Trend in Students' Academic Performance in SSCE Results in South West, Nigeria from 2013 to 2022

H_0 : There is no significant relationship between effectiveness of principals in the administration of curriculum and instruction and students' academic performance in

public senior secondary schools in South West, Nigeria.

Table 5: Linear Regression Analysis of Significant Relationship between Principals' Administrative Effectiveness in Curriculum and Instruction and Students' Academic Performance in Public Senior Secondary Schools in South West, Nigeria

R	R square	Adjusted R Square	R	Std. Error of Estimate	Extent of Prediction	Sig.	Decision
.551	.304	.301	.01968		30.4%	.017	Rejected

* $p < 0.05$ = Significant relationship

The computed correlation coefficient of .551 in Table 5 shows that there is a moderate positive relationship between the variables. With the probability value ($p = .017 < 0.05$) less than the alpha level of 0.05, the null hypothesis is rejected. This implies that there is significant relationship between effectiveness of principals in the administration of curriculum and instruction and students' academic performance in public senior secondary schools in South West, Nigeria. The R square (R^2) value of .304 shows that 30.4% of the variance in students' academic performance is predicted by principals' administrative effectiveness in curriculum and instruction

H_0 : There is no significant relationship between effectiveness of principals in the administration of school plant and facilities and students' academic performance in public senior secondary schools in South West, Nigeria.

Table 6: Linear Regression Analysis of Significant Relationship between Principals' Administrative Effectiveness in School Plant and Facilities and Students' Academic Performance in Public Senior Secondary Schools in South West, Nigeria

R	R square	Adjusted R Square	R	Std. Error of Estimate	Extent of Prediction	Sig.	Decision
.543	.295	.292	.02359		29.5%	.020	Rejected

* $p < 0.05$ = Significant relationship

The computed correlation coefficient of .543 in Table 6 shows that there is a moderate positive relationship between the variables. With the probability value ($p = .020 < 0.05$) less than the alpha level of 0.05, the null hypothesis is rejected. This indicates that there is significant relationship between effectiveness of principals in the administration of school plant and facilities and students' academic performance in public senior secondary schools in South West, Nigeria. The R square (R^2) value of .295 implies that 29.5% of the variance in students' academic performance is predicted

by the effectiveness of principals in school plant and facilities administration

H_03 : There is no significant relationship between effectiveness of principals in the administration of student personnel and students' academic performance in public senior secondary schools in South West, Nigeria.

Table 7: Linear Regression Analysis of Significant Relationship between Principals' Administrative Effectiveness in Student Personnel and Students' Academic Performance in Public Senior Secondary Schools in South West, Nigeria

R	R square	Adjusted Square	R	Std. Error of Estimate	Extent of Prediction	Sig.	Decision
.522	.272	.269	.02773		27.2%	.029	Rejected

* $p < 0.05$ = Significant relationship

The computed correlation coefficient of .522 in Table 7 shows that there is a moderate positive relationship between the variables. With the probability value ($p = .029 < 0.05$) less than the alpha level of 0.05, the null hypothesis is rejected. This implies that there is significant relationship between effectiveness of principals in the administration of student personnel and students' academic performance in public senior secondary schools in South West, Nigeria. The R square (R^2) value of .272 implies that 27.2% of the variance in

students' academic performance is predicted by the effectiveness of principals' in student personnel administration.

H_04 : There is no significant relationship between principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria.

Table 8: Multiple Regression Analysis of Significant Relationship between Principals' Administrative Effectiveness and Students' Academic Performance in Public Senior Secondary Schools in South West, Nigeria

Variable	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.	Rank
	B	SE	(β)			
(Constant)	3.517	1.883		2.705	.041	
Curriculum and instruction	.251	.096	.380	4.561	.000	1 st
School plant and facilities	.245	.121	.359	3.947	.003	2 nd
Student personnel	.229	.137	.343	3.758	.005	3 rd
α Dependent Variable: Students' Academic Performance						

* $p < 0.05$ = Significant relationship

The multiple regression analysis presented in Table 8 examined the relationship

between principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria. The results revealed that all three dimensions of principals' administrative effectiveness significantly predicted students' academic performance. Among these, curriculum and instructional administration emerged as the strongest predictor ($\beta = .380$, $t = 4.560$, $p < .05$), followed by school plant and facilities administration ($\beta = .359$, $t = 3.947$, $p < .05$) and student personnel administration ($\beta = .343$, $t = 3.758$, $p < .05$). Since the p-values of all sub-variables were below the 0.05 significance level, the null hypothesis was rejected. This indicates a significant relationship between principals' administrative effectiveness and students' academic performance, implying that improved administrative effectiveness leads to higher academic achievement among students in public senior secondary schools in South West, Nigeria.

Discussion of Findings

The findings of this study revealed that principals were generally effective in the administration of curriculum and instruction, school plant and facilities, and student personnel in public senior secondary schools in South West, Nigeria. The study further established that principals' administrative effectiveness in these areas had a significant positive relationship with students' academic performance. This underscores the pivotal role of the principal as an instructional leader and administrator whose efficiency in managing school resources directly impacts learning outcomes.

The finding that principals are effective in curriculum and instructional administration aligns with the results of previous studies by Opara (2023), Oredein and Opatunde (2023), Hompashe (2018), Bogale (2019), Ndambuki (2020), and Omokhua and Agi

(2021), all of which affirmed that effective instructional leadership enhances students' academic performance. Principals who properly supervise instruction, support teachers, and monitor curriculum implementation tend to foster higher academic achievement among students. Similarly, the finding that principals are effective in the administration of school plant and facilities corroborates the reports of Opara (2023), Anam (2018), and Oleforo and Maxwell (2015), who observed that effective management of school facilities contributes to improved students' performance. When principals plan adequately for the procurement, maintenance, and utilization of physical resources, they create a conducive learning environment that promotes academic excellence. This result also supports Mohammed et al. (2019), who found that principals' management of facilities significantly predicts students' academic achievement.

The study also established that principals are effective in administering student personnel services, which significantly relates to students' academic performance. This agrees with the findings of Opara (2023), Anam (2018), and Senguo and Ilomo (2020), who observed that effective management of student welfare, guidance, discipline, and co-curricular programmes enhances learners' motivation and academic success. The result also aligns with Suleiman, Hanafi, and Thanslikem (2019) as well as Owan and Ekaette (2019), who found that student-support services such as counselling, health, and library programmes contribute positively to academic outcomes.

Furthermore, the study revealed a steady improvement in students' academic performance in SSCE results in public senior secondary schools in South West, Nigeria, between 2013 and 2022. This observation is consistent with the findings of Aniekop (2023) and Sule (2016), who

reported positive trends in students' performance in similar contexts. Overall, the findings suggest that principals' administrative effectiveness in curriculum and instruction, school plant, and student personnel management remains a strong determinant of students' academic success in public senior secondary schools in South West, Nigeria.

Conclusion

The findings of the study established that principals are effective in the administration of curriculum and instructional leadership, school plant and facilities, and student personnel. The study also revealed that there is a high level of teachers' professional commitment, and a good performance in students' SSCE results from 2013 to 2022. The study concluded there is a significant relationship between principals' administrative effectiveness and students' academic performance in public senior secondary schools in South West, Nigeria.

Recommendations

The following recommendations were made in respect of the findings of the study.

1. School principals should collaborate with teaching staff towards ensuring that students' learning activities are structured to reflect academic expectations and better academic outcomes in external examinations.
2. School principals should collaborate with the State Post Primary Education Boards in Ondo, Osun and Ogun State towards actualizing adequate procurement of functional school plant and facilities in order to facilitate effectiveness in the teaching and learning process in public senior secondary schools.
3. School principals should prioritize the selection of new intakes who meet the stipulated admission requirements in order to sustain high educational standards in the admission process and the effectiveness of

principals in their administration of student personnel.

References

Abdulrasheed, O., & Bello, A. S. (2015). Challenges to secondary school principals' leadership in Northern region of Nigeria. *British Journal of Education*, 3(3), 1–5.

Adeyemi, T. O., & Ademiwa, S. O. (2012). Conflict management strategies and administrative effectiveness in Nigeria universities. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(3), 368–375.

Adeniyi, W. O. (2012). *Personality traits, emotional intelligence and administrative effectiveness of principals of secondary schools in Southern Nigeria* (Unpublished Ph.D. thesis). Obafemi Awolowo University, Ile-Ife, Nigeria.

Adeniyi, W. O., & Akinola, O. B. (2020). Behavioural problems among secondary school students in Osun State: A nexus of principals' administrative effectiveness. *International Journal of Psychology and Behavioural Sciences*, 10(1), 17–23.

Akinbode, A. I., & Alshuhumi, S. R. A. (2018). The principalship in the twenty first century. *Pupil: International Journal of Teaching, Education and Learning*, 2(2), 137–148.

Akomolafe, C. O. (2012). A comparative study of principals' administrative effectiveness in public and private secondary schools in Ekiti State, Nigeria. *Journal of Education and Practice*, 3(13), 212–234.

Aloga, A. O. (2014). School plant administration: The challenges and transformation in learning and teaching in developing countries: A case study of secondary schools in Nigeria. *Proceedings of Global Summit on Educational GSE* (pp. 4–5), March 2014, Kuala Lumpur, Malaysia.

Auta, R. I. (2012). *Impact of school facilities on teaching and learning in Nigerian Airforce secondary schools* (Unpublished

M.Ed. dissertation). Ahmadu Bello University, Zaria, Nigeria.

Badamasi, A. B., & Mohammed, A. (2019). Utilization and maintenance of school facilities as correlate of students' academic achievement in senior secondary schools in Adamawa State, Nigeria. *Specialty Journal of Knowledge Management*, 4(4), 30–36.

Berhane, A. T. (2012). Instructional leadership and school climate: A case study of a secondary school in Eritrea. *Library Information and Computer Education Journal (LICEJ) Special Issue*, 1(1), 846–855.

Besong, B. J. (2014). Principals' administrative effectiveness and staff productivity in selected secondary schools in South West Region, Cameroon. *International Journal of Academic Research in Management*, 3(2), 155–166.

Bottery, M. (2016). *Educational leadership for a more sustainable world*. London: Bloomsbury Academic.

Cherry, K. (2022). *What is correlational study?* Verywell Mind. <http://www.verywellmind.com/correctional-study>

Diaz-Morales, J. F., & Escribano, C. (2015). Social jetlag, academic achievement and cognitive performance: Understanding gender/sex differences. *Chronobiology International*, 32(6), 822–831.

Dimkpa, D. I. (2015). Teachers' conduct in the 21st century: The need for enhancing students' academic performance. *Journal of Education and Practice*, 6(35), 71–78.

Efe, M. O., & Aderson, F. E. (2016). Effect of class size and students' attitudes on academic performance in Chemistry at demonstration secondary school. *Journal of Research and Method in Education*, 6(1). <https://www.iosrjournals.org>

Eneh, F. O. (2016). *Relationship between principals' personal variables and managerial effectiveness in federal capital territory secondary schools* (Unpublished thesis). University of Abuja.

Ereh, C. E., & Okon, N. N. (2015). Keeping of teachers' records and principals' administrative effectiveness in Akwa Ibom State secondary schools, Nigeria. *International Journal of Education, Learning and Development*, 4(1), 40–44.

Federal Republic of Nigeria. (2013). *National policy on education (4th ed.)*. Lagos: Nigerian Educational Research and Development Council Press.

Hallinger, P., & Heek, R. H. (2016). Exploring the principal's contribution to school effectiveness. *Journal of School Effectiveness and School Improvement*, 9(2), 157–191.

Hallinger, P., & Murphy, J. (2013). A conceptual framework of systematic reviews of research in educational leadership and management. *Journal of Educational Administration*, 51(2), 126–149.

Ike, A. O. (2015). *Security management situations in public secondary schools in North Central Zone of Nigeria* (Doctoral dissertation). University of Nigeria.

Jimoh, B. O., Akinlosotu, N. T., & Ojo-Maliki, V. A. (2017). Influence of school plant on secondary school students' academic performance in Economics in Ile-Oluji Okeigbo Local Government Area of Ondo State, Nigeria. *Asia Pacific Journal of Multidisciplinary Research*, 5(2), 30–35.

Kadir, A. N. J. (2017). Student personal services administration and sustainable education in Nigeria. *Pakistan Journal of Educational Research and Evaluation (PJERE)*, 3(2), 064–079.

Kalagbor, L. D. (2017). Administrative strategies and challenges of school plant

management in rural and urban public secondary schools in Rivers State, Nigeria. *International Journal of Operational Research in Management, Social Science & Education*, 3(1), 155–164.

Kiamba, E. W., Mutua, F., & Mulwa, D. (2017). Influence of teachers' subject matter knowledge on students' academic achievement of Kiswahili Language in public senior secondary schools in Kathonzweni Sub-County, Kenya. *Scholarly Research Language*, 6(29), 1–8.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607–610.

Kumar, S., Agarwal, M., & Agarwal, N. (2021). Defining and measuring academic performance of HEI students: A critical review. *Turkish Journal of Computer and Mathematics Education*, 12(6), 3091–3105.

Lemoine, S., et al. (2014). From managerial to instructional leadership: Barriers principals must overcome. *Kennesaw*, 17(1), 17–30.

Mark, M. (2013). *Pathway model of academic performance of students in secondary schools* (Monograph).

Moodly, A., & Toni, N. (2015). Women's voices of and on leadership in higher education. Paper presented at the Global Research and International Services (GRDS) 7th International Conference on Teaching Education and Learning (ICTEL), 10–11 October 2015, Point Quz Piments, Mauritius.

Mora, M. (2019). *What is the right sample size for a survey? Relevant Insights*. <https://www.relevantinsights.com/articles/samples-size/>

Narad, A., & Abdullahi, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(2), 171–184.

Ndambuki, B. K. (2020). *Influence of principals' instructional leadership practices on students' academic performance in public secondary schools in Makueni County, Kenya* (Unpublished thesis). South Eastern Kenya University.

Ninikanwa, I. O. (2014). *Effective practices in the management of school plant in secondary schools in South East, Nigeria*. <http://www.lenn.edu.ng/>

Nonyelum, D. N., Ogugua, K. K., & Abah, J. A. (2022). Influence of student-teacher relationship on the academic performance of junior secondary school students in Mathematics in Makurdi Local Government Area of Benue State, Nigeria. *Villagemath Educational Review*, 3(1), 27–52.

Nwamara, E. N., & Igwe, U. R. (2023). Utilization of school plant and effective teaching and learning in a contemporary society. *International Journal of Contemporary Studies in Education*, 2(3), 215–223.

Olayiwola, O. T. (2012). *Research methods and procedures* (2nd ed.). Kaduna: Hanifam Press Ltd.

Okonkwo, M. C., & Obineli, A. S. (2013). Challenges of universal basic education programme: The role of counselors. *An International Multidisciplinary Journal*, 7(4), 265–273.

Olorunsola, E. O., & Belo, F. A. (2018). Administrative challenges and principals' managerial effectiveness in Ogun State public secondary schools. *International Journal of Educational Administration and Policy Studies*, 10(5), 48–55.

Omokhua, K. O., & Agi, U. K. (2021). Principalship and students' academic performance in public secondary schools in River State. *Journal of Resourcefulness and Distinction*, 18(1), 1–20.

Orji, S. O. N. (2019). Quality assurance efforts and public secondary school

students' academic performance in Cross River State, Nigeria. *International Journal of Educational Research*, 6(2), 99–107.

Owan, V. J., & Ekaette, S. O. (2019). Students' personnel management and academic effectiveness of secondary school students in Calabar education zone of Cross River State, Nigeria. *International Journal of Psychological and Brain Sciences*, 4(2), 13–19.

Owan, V. J., Bassey, B. A., & Ekpe, N. B. (2020). Assessment of students' attitude towards test-taking in secondary schools in Afikpo Education Zone, Ebonyi State, Nigeria. *American Journal of Creative Education*, 3(1), 1–9. <https://doi.org/10.20448/815.31.1.9>

Sanchez, J., & Watson, J. M. (2021). Effective instructional leadership practices in high-performing elementary schools. *Journal of School Administration Research and Development*, 6(2), 60–70.

Sergiovanni, T. J. (2014). *The principalship: A reflective practice perspective*. United States: Pearson/Allyn and Bacon Press.

Shao, W. S. (2012). The various concepts of the curriculum and the factors involved in curricula-making. *Journal of Language Teaching and Research*, 3(1), 153–158.

Sharm. (2012). Meaning of academic performance. *International Journal of Science, Technology, Education and Research*. <http://www.studymode.com/essays/meaning-of-Academicpefomrance-1107119.html>

WAEC Chief Examiner's Report (2014–2021).

WAEC Statistics (2019). *National Bureau of Statistics (WAEC Result Statistics)*, September 2019.

Wahab, M. B. A., & Mustapha, S. M. B. (2020). The relationship between principals' instructional leadership and school performance of rural public secondary schools in Malaysia. *Journal of Education and Social Sciences*, 15(2).

Yusuf, T. A., Onifade, C. A., & Bello, O. S. (2016). Impact of class size on learning, behavioural and general attitudes of students in secondary schools in Abeokuta, Ogun State, Nigeria. *Journal of Research Initiatives*, 2(1), 108–119.