Quality Assurance Techniques and Administration of Public Secondary Schools in Bayelsa State

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Abstract

The study investigated the relationship between quality assurance techniques and administration of public secondary schools in Bayelsa State. Three research questions and Three corresponding hypotheses guided the study. This study adopted a correlation research design. The study was carried out in Bayelsa State. The population of this study consisted of 648 administrators (principals and vice principals) in 297 public secondary schools in Bayelsa State. The entire population was used as the sample because the number appears to be small and manageable for the study. Thus, census sample technique was employed in this study. The research instrument used in this study is "Quality Assurance Techniques Questionnaire" (QATQ) and 'Administration of Public Secondary School Questionnaire' (APSSQ). The instruments were validated and tested for reliability which gave an overall reliability coefficient index of 0.70. Pearson Product Moment Correlation was used to provide answer to the six research questions posed in the study. The null hypotheses were tested using t-transformation at 0.05 level of significance. The study revealed that school quality assurance measures such as provision of instructional materials, availability of physical facilities and staff development has strong positive correlation with administration in secondary schools in Bayelsa State. It was recommended among others that school administrators should ensure that instructional materials are sufficiently provided for teachers to aid effective instructional delivery and achievement of educational goals and objectives.

Keywords: Quality Assurance Techniques, Administration, Public Secondary Schools.

Introduction

Education generally remains the pivot upon which the wheels of society revolve. In all nations, education is regarded as an important aspect of human life that is rationally designed and organized to build human capital to raise their productivity and increase their social, economic and political life. It is universally regarded as a form of investment in humans, which yields both economic and non-economic benefits and contributes to a country's future wealth by increasing the productive capacity of its people (Eluozo & Nwogu, 2019).

Quality remains the most important attribute that creates value about products and services. It focuses on changes as well as identifying gaps in quality, techniques of performance and mechanism for quality control. Assurance refers to the action of instilling confidence, the condition of being definite, or the act of ensuring certainty. Quality Assurance refers to the deliberate and methodical operations carried out inside a system to ensure that the specified standards for a product or service are met to a high standard. Quality assurance refers to the deliberate and organised measures taken to ensure that a product or service meets the defined specifications (Anad, 2004). Quality assurance is a series of protocols that all organizations should implement to ensure that specific standards are consistently defined and achieved for a particular product or service.

Quality in education emphasizes teachers' competence, creativity and commitment, and how educational administrators organize school activities in order to realize the full potentials of all personnel educational institutions.

Quality standards are critical and depend on effective policy planning, implementation and monitoring, quality assurance in education means the pertinent and suitability of the educational programme to meet the needs of the institution and achieve the set objectives (Fadipe, 2019). Idialu (2013) defined quality assurance as ways of managing the educational sector and ensuring that services provided are kept at high standards that will positively affect its products (students). It is better and more rewarding to take steps to prevent failure and wastage in secondary schools, hence the need for quality assurance which is preventive rather than corrective. Quality assurance (QA) techniques in public secondary schools are critical for ensuring that educational standards are consistently met and that students receive a high-quality education. These techniques include a range of strategies such as Provision of Instructional Resources, Availability of Physical Facilities and Staff Development.

Quality assurance (QA) techniques in public secondary schools are essential for maintaining high educational standards and ensuring that students receive a quality education. QA is the provision of instructional resources. This includes textbooks, teaching aids, and digital resources that support the curriculum and enhance the learning experience. According to OECD (2022), access to high-quality instructional resources is closely linked to improved student outcomes and more effective teaching practices. Schools that invest in up-to-date and relevant instructional materials provide teachers with the tools they need to deliver engaging and comprehensive lessons, which in turn benefits student learning (OECD, 2022).

QA technique involves the availability of physical facilities. Physical facilities are fundamental for any educational institution and it is directly connected with school effectiveness as well as educational development. Obviously, physical facilities in the school motivate students to learn. Adequate attention is currently on physical facilities in Nigeria educational system and it has been repeatedly found to have positive relationship with standard and quality of educational system. Well-maintained and adequately equipped classrooms, laboratories, libraries, and recreational areas are vital for creating an environment conducive to learning. According to World Bank (2023), the quality of school infrastructure directly impacts student engagement and academic performance. Schools with modern and well-maintained facilities tend to have higher student achievement levels because they offer a more comfortable and stimulating learning environment (World Bank, 2023).

Staff development is the coherent sum of activities targeted to strengthen and extend the knowledge and skills and conception of a teacher in a way that will lead to changes in their way of thinking and their educational behaviour. Staff development according Cole (2014) is any learning activity that is directed towards further needs rather than present needs of staff and is concern more with career growth than immediate performance. Permida (2017) opined that staff development refers to a variety of education and training activities which are designed purposely to give staff additional knowledge, skills, attitudes, experiences and understanding needed to perform up to required standards. The prerequisite for promotion in educational system in Nigeria, is mostly done on the numbers of years spent in service. It is assumed that every principal have spent so many years as a teacher and therefore has the knowledge to be a mentor to junior teachers thereby serving as mentor. Mentoring is the key element of staff development in educational institution. The School administrators also serve as a mentor to the younger and new teachers.

Effective administration plays a pivotal role in implementing QA techniques and ensuring their success. Administrators are responsible for creating an environment that supports QA practices, including allocating resources, managing facilities, and overseeing staff development. Their role involves setting clear educational goals, establishing performance metrics, and using assessment feedback constructively to drive improvements. Fullan (2001) emphasizes that effective school leadership is essential for fostering a culture of continuous improvement and aligning QA practices with the school's educational mission. Therefore, this study focuses on Quality Assurance Techniques and Administration of Public Secondary Schools in Bayelsa State

Statement of the Problem

To fulfill the purpose of quality assurance in Nigerian education system, scholars had listed some basic techniques and educational management functions that should be streamlined and practiced in similar terms by educational managers in order to enhance quality assurance in the education system. Prominent amongst such techniques is good planning, regular monitoring and evaluation, quality control mechanism, effective supervision and conducive learning environment.

Quality assurance is needed to ensure that the operations of these public secondary schools are aligned with the stated objective for secondary school education. In order to realize quality secondary education in Bayelsa State, the government established agencies and departments of supervision, inspection and quality assurance units and also came out with quality assurance programmes. With all these ministries, agencies and programmes the quality of secondary school education keeps declining.

In public secondary schools, ensuring the consistent application of quality assurance (QA) techniques presents a significant challenge. One major problem is the inadequate provision of instructional resources, which can hinder the effectiveness of teaching and learning. Many schools face issues with outdated textbooks, insufficient digital tools, and lack of access to current educational materials. This deficiency can lead to disparities in educational quality and impact student performance negatively. the lack of high-quality instructional resources is a critical barrier to improving educational outcomes and can exacerbate existing inequalities in education.

Another pressing issue is the inadequate maintenance and management of physical facilities, which affects the learning environment and overall school performance. Many public secondary schools struggle with poorly maintained infrastructure, including overcrowded classrooms, insufficient laboratory equipment, and inadequate recreational facilities. These conditions not only impede student engagement but also contribute to lower academic achievement. The World Bank (2023) emphasizes that subpar school infrastructure can directly affect student outcomes and limit the effectiveness of teaching and learning processes. Addressing these problems requires targeted investment and effective administrative practices to ensure that schools are equipped to provide a high-quality education. Based on this the study seek to examine the Quality Assurance Techniques and Administration of Public Secondary Schools in Bayelsa State

Purpose of the Study

The main purpose of the study is to examine quality assurance techniques and the administration of public secondary schools in Bayelsa State. Specifically, the study sought to;

- 1. Examine the relationship between the provision of instructional resources and the administration of public secondary schools in Bayelsa State.
- 2. Ascertain the relationship between availability of physical facilities and the administration of public secondary schools in Bayelsa State.
- 3. Establish the relationship between staff development and the administration of public secondary schools in Bayelsa State.

Research Questions

From the above specific objectives, the following research questions were formulated.

- 1. What is the relationship between provision of instructional resources and the administration of public secondary schools in Bayelsa State?
- 2. What is the relationship between availability of physical facilities and administration of public secondary schools in Bayelsa State?
- 3. What is the relationship between staff development and administration of public secondary schools in Bayelsa State?

Research Hypotheses

From the above research questions, the following null hypotheses are formulated.

- 1. There is no significant relationship between provision of instructional resources and the administration of public secondary schools in Bayelsa State.
- 2. There is no significant relationship between availability of physical facilities and administration of public secondary schools in Bayelsa State.
- 3. There no significant relationship between staff development and the administration of public secondary schools in Bayelsa State.

Methodology

This study adopted a correlation research design. The study was carried out in Bayelsa State. The population of this study consisted of 648 administrators (principals and vice principals) in 297 public secondary schools in Bayelsa State. The entire population of 648 administrators (principals and vice principals) in 297 public secondary schools in Bayelsa State was used as the sample size ecause the number appears to be small and manageable for the study. Thus, census sampling technique was employed in this study. A self-designed instrument titled 'Quality Assurance Techniques Questionnaire (QATQ) and Administration of Public Secondary School Questionnaire' (APSSQ), the questionnaire was structured on a 4-point Likert rating scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1, in which a respondent is required to tick ($\sqrt{}$) his/her choice in the space provided for response to the statements in the questionnaire. To validate the instrument, the researcher adopted the face and content validity method. The instruments where validated by experts from the Department of Educational Management, Faculty of Education, Rivers State University. In order to establish the reliability of the instrument, the instrument was administered ten copies of OATO and APSSO to school administrators in Rivers State who were not part of the study. Their responses were analyzed using Cronbach Alpha method. The computation yielded reliability coefficients of 0.82, 0.78, 0.88, 0.79, 0.89, and 0.77 for the various clusters of the instrument respectively. Data collected for this study were analyzed using Pearson Product Moment Correlation Coefficient (PPMCC) statistics.

Result

Research Question 1: What is the relationship between provision of instructional resources and administration of public secondary schools in Bayelsa State?

Table 1: Pearson Product Moment Correlation Analysis between Provision of Instructional Resources and

Variables	N	$\sum_{\mathbf{Y}} \mathbf{X}$	$\sum X^2$ $\sum Y^2$	\sum XY	r-cal	Remarks
Provision of Instruction Resource (X)	540	11692	284790			
				200373	+0.86	High Positive
Administration (Y)	540	8304	145758			

Source: Field Survey, 2024

Table 1 presents the summary of Pearson Product Moment Correlation Analysis between Provision of Instructional Resources and Administration of Public Secondary Schools in Bayelsa State. The result showed that the r-calculated value was 0.86, indicating a high positive relationship. The result implies that the relationship between the provision of instructional resources and administration of public secondary schools is strong and positive. R-cal value of 0.86 infers that when instructional resources are sufficiently provided in secondary schools there would be improvement in the administration of secondary schools in Bayelsa State.

Research Question 2: What is the relationship between availability of physical facilities and administration of public secondary schools in Bayelsa State?

Table 2: Pearson Product Moment Relationship Analysis between Availability of Physical Facilities and Administration of Public Secondary Schools in Bayelsa State

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Variables	N	$\sum_{\mathbf{Y}} \mathbf{X}$	$\begin{array}{c} \sum X^2 \\ \sum Y^2 \end{array}$	∑XY	r-cal	Remarks
Availability of Physical Facilities (X)	540	9022	173888			
				156776	+0.88	High Positive
Administration (Y)	540	8304	145758			

Source: Field Survey, 2024

Table 2 presents the summary of Pearson Product Moment Correlation Analysis between availability of physical facilities and administration of public secondary schools in Bayelsa State. From the analysis, the r-calculated value is +0.88, indicating a high positive relationship. This value shows a high magnitude and positive direction of the relationship between availability of physical facilities and administration of public secondary schools in Bayelsa. The implication of this result is that availability of physical facilities leads to effective administration of secondary schools. In a reverse order, the finding could also be interpreted as unavailability of physical facilities results to ineffective administration in public secondary schools in Bayelsa State.

Research Question 3: What is the relationship between staff development and administration of public secondary schools in Bayelsa State?

Table 3: Pearson Product Moment Correlation Analysis between Staff Development and Administration of Public Secondary Schools in Poyeles State

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Variables	N	$\sum_{\mathbf{Y}} \mathbf{X}$	$\sum X^2$ $\sum Y^2$	∑XY	r-cal	Remarks
Staff Development (X)	540	6861	97781			
				117463	+0.86	High Positive
Administration (Y)	540	8304	145758			

Source: Field Survey, 2024

Table 3 revealed the summary of Pearson Product Moment Correlation analysis between Staff Development and Administration of Public Secondary Schools in Bayelsa State. According to the analysis, $\Sigma X = 6861$, $\Sigma Y = 8304$, $\Sigma X^2 = 97781$, $\Sigma Y^2 = 145758$ and $\Sigma XY = 117463$ which gave r-calculated value of +0.86. The r-cal value (+0.86) obtained implies that there is a high positive relationship between staff development and administration of public secondary schools in Bayelsa State. That is, as staff development index grows there is a corresponding improvement in school administration and vice versa.

Hypotheses

Ho1: There is no significant correlation between provision of instructional resources and the administration of public secondary schools in Bayelsa State.

Table 4: t-transformation Analysis of the Correlation between Provision of Instructional Resources and the Administration of Public Secondary Schools in Bayelsa State

Variables	N	∑ X ∑ Y	$\begin{array}{c} \sum X^2 \\ \sum Y^2 \end{array}$	a	r-cal	t-cal	tcrit	Rmks
Provision of Instructional Resources (X)		11692	284790					
				0.05	0.86	76.74	1.96	$\begin{array}{c} Sig. \\ H_o \end{array}$
Administration (Y)	540	8304	145758					

Source: Field Survey, 2024

Table 4 displays the t-transformation analysis of the correlation between provision of instructional resources and the administration of public secondary schools in Bayelsa State. The analysis on the table revealed that the sum and sum of squares for provision of instructional resources are 11692 and 284790, whereas that of the independent variable (school administration) are 8304 and 145758 respectively. The correlation coefficient (0.86) when transformed to t-cal at 538 degrees of freedom under 0.05 level of significance is 86.13. Since the t-cal (76.72) is greater than t-critical (1.96), the null hypothesis was rejected. Thus, the null hypothesis of no significant relationship between provision of instructional material and administration in senior secondary schools in Bayelsa State is rejected. This implies that there is a significant positive relationship between provision of instructional resources and administration of public secondary schools in Bayelsa State.

Ho2: There is no significant correlation availability of physical facilities and administration of public secondary schools in Bayelsa State.

Table 5: t-transformation Analysis of the Correlation Between Availability of Physical Facilities and the Administration of Public Secondary Schools in Bayelsa State

Variables	N	$\sum_{\mathbf{Y}} \mathbf{X}$	$\sum X^2 \\ \sum Y^2$	A	r-cal	t-cal	tcrit	Rmk
Availability of Physical Facilities (X)	540	9022	173888					
				0.05	+0.88	88.73	1.96	$\begin{array}{c} \text{Sig.} \\ \text{H}_{\text{o}} \end{array}$
Administration (Y)	540	8304	145758					

Source: Research Data Output, 2024

Table 5 shows the summary of t-transformation Analysis of the correlation between availability of physical facilities and the administration of public secondary schools in Bayelsa State. The analysis on the Table 4.8 showed that the sum and sum of squares for the independent variable (availability of physical facilities) are 9022 and 173888, whereas that of the dependent variable (school administration) 8304 and 145758 respectively. The relationship coefficient (0.88) when transformed to t-cal at 538 degrees of freedom under 0.05 level of significance is 88.73. Since the t-cal (88.73) is greater than t-critical (1.96), the null hypothesis was rejected. Thus, the null hypothesis of no significant relationship between availability of physical facilities and the administration of public secondary schools in Bayelsa State is rejected. This implies that the relationship between availability of physical facilities and the administration of public secondary schools is significant.

Ho3: There no significant correlation between staff development and the administration of public secondary schools in Bayelsa State.

Table 6: t-transformation Analysis of the Correlation between Staff Development and the Administration of Public Secondary Schools in Bayelsa State

Variables	N	$\sum \mathbf{X}$ $\sum \mathbf{Y}$	$\begin{array}{c} \sum X^2 \\ \sum Y^2 \end{array}$	A	r-cal	t-cal	tcrit	Rmk
Staff Development (X)	540	6917	99399					
Administration (Y)	540	8304	145758	0.05	+0.86	76.72	1.96	Sig. H _o

Source: Research Data Output, 2024

Table 6: revealed the t-transformation analysis of the correlation between staff development and the administration of public secondary schools in Bayelsa State. The analysis on the table 4.8 showed that the sum and sum of squares for the independent variable (staff development) are 6917 and 99399, whereas that of the dependent variable (school administration) 8304 and 145758 respectively. In the table, the r-cal value (0.86) was transformed to t-cal which gave 76.72. At 538 degrees of freedom under 0.05 level of significance, the t-critical obtained was 1.96. Comparing the t-cal (76.72) to t-crit (1.96), the t-cal is greater than the t-critical value, which means, the null hypothesis was rejected. Thus, the null hypothesis of no significant relationship between staff development and the administration of public secondary schools in Bayelsa State is rejected. This implies that the relationship between staff development and the administration of public secondary schools in Bayelsa State is significant.

Discussion of Findings

The findings of the study for research question one revealed that there is a high positive and significant relationship between provision of instructional materials and administration of public secondary schools in Bayelsa State. The corresponding hypothesis one also revealed that there is no significant correlation between provision of instructional resources and the administration of public secondary schools in Bayelsa State. The result reveals that the correlation r-calculated value was 0.86 which indicated a high positive relationship. The finding of this study aligns with Aladenusi and Oluwakemi (2018) who investigated the predictive power of some quality assurance indices (school climate, principals' leadership role, instructional supervision, availability and utilization of instructional resources) on teachers' job effectiveness in secondary schools.

The findings of the study for research question two revealed that there is a high and positive relationship between availability of physical facilities and administration in public secondary schools in Bayelsa State. The corresponding hypothesis also revealed that there is a significant relationship in availability of physical facilities and administration of public secondary schools in Bayelsa State. The result was established with a calculated r-value of 0.86. The finding infers that the more physical facilities are available in the school, the more effective school administration would be. This finding agrees with Nwite and Okpalanze (2023) who opined that the provision of infrastructural facilities, recruitment of qualified teachers, secondary school curriculum implementation and effective leadership management are quality assurance practices in secondary schools in Enugu State.

The findings of the study for research question three revealed that there is a high and positive relationship between staff development and administration in public secondary schools in Bayelsa. The corresponding hypothesis also revealed that there is a significant relationship between staff development and administration in public secondary schools in Bayelsa State.

The result reveals that the correlation coefficient r-calculated value was 0.86. This implies that as staff are being exposed to personal and professional development, there is significant improvement in school administration in Bayelsa State.

Conclusion

Based on the findings, of the study it was concluded that there is a significant relationship between Provision of Instructional Resources, Availability of Physical Facilities and Staff Development; Implying that a relationship exists between quality assurance techniques and administration of public secondary schools in Bayelsa State.

Recommendations

Based on the findings of the study, the following recommendations have been made;

- 1. School administrators should ensure that instructional materials are sufficiently provided for teachers to aid effective instructional delivery and achievement of educational goals and objectives this will help teachers increase their pedagogical skills and development for efficiency in instructional delivery
- 2. Government should avail physical facilities in public secondary in Bayelsa State and rehabilitate and maintain dilapidated and less physical facilities to avoid weakening the fortress for quality delivery in secondary school.
- 3. School principals should encourage and support staff development programmes among secondary school teachers as this would enable teachers to give priority to personal and professional development.

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