



School Resource Planning and Development and Students' Academic Performance in Public Secondary Schools in Bayelsa State, Nigeria

S. P. UGOLO

Bayelsa Teacher Training Registration and Certification Board, Nigeria

PHILIP IGENEGBAI

University of Benin, Benin City, Nigeria

Abstract. The study examined school resource planning and development and students' academic performance in Bayelsa State. Five research questions were raised to guide the study. It adopted the descriptive research design. The population of the study comprised 3631 teachers in public secondary schools as well as NECO examination results of students from 2019-2023 in Bayelsa State. A sample size of 360 teachers was selected using the Taro Yamane formula. The multistage sampling procedure was adopted to select the sampled teachers. Data were collected using two instruments; a researcher designed questionnaire; titled School Resource Planning and Development Questionnaire (SRPDQ) and a proforma; NECO Result Extraction Form (NECOREF) to determine the areas of School Resource Planning and Development indicators in place, and Students' Academic Performance were measured using the average percentage pass rates of five credits including English Language and Mathematics in the National Examinations Council (NECO) Senior School Certificate Examination for 2019-2023 academic sessions. The findings revealed that the level of resource planning and development, and students' academic performance were high, respectively in Bayelsa State, among others. Based on the findings, it recommended that resources planning and development must be given more attention as it influences and determines performance.

Keywords: School resource, Planning, Development, Academic performance, Pattern. Introduction.

1. Introduction

The effectiveness of education as a fundamental instrument for national development, social transformation, and human capital formation has been universally acknowledged. This is because through it, individuals are equipped with the knowledge, skills, attitudes, and competencies required for productive participation in society. Education is a catalyst for economic growth and sustainable development. The attainment of the Sustainable Development Goal (SDG) 4, which emphasizes inclusive and equitable quality education for all, places emphasis on the importance of effective educational planning, adequate resource allocation, and efficient school management as catalyst for improved learning outcomes (UNESCO, 2021). The secondary education level in Nigeria occupies a strategic position within the nation's education delivery system. It is often described as the intermediary/transition level of education as it links both basic and tertiary levels of education. It prepares students for employment, entrepreneurship, and lifelong learning (Federal Republic of Nigeria (FRN), 2013). Hence, proper planning, development, and effective utilization of educational resources is essential for optimal success.

Educational planning is a vital management function, which involves forecasting of future requirements, a systematic process of setting goals, defining objectives and developing strategies to achieve desired educational outcomes, mobilization of resources, implementation of educational programmes, and evaluation of outcomes (Nyam & Danian, 2024). It is also a strategic process for coordinating education

policies, research, data management, resource allocation, and institutional development to improve educational service delivery in Nigeria (Federal Ministry of Education (FME), 2022). Therefore, effective educational planning creates the foundation upon which schools organize their human, financial, physical, and instructional resources to achieve institutional goals efficiently.

School resource planning entails a systematic process of educational administrators identifying, forecasting, acquiring, allocating, coordinating, monitoring, and evaluating the needed resources required for effective instructional delivery and school administration (Wandera, Kamugisha, Barasa, Nalubega & Mbayo, 2025).

Resource planning encompasses human resources such as qualified teachers, principals, laboratory technologists, librarians, counsellors, and support staff; financial resources including government grants, internally generated revenue, and community contributions; physical resources comprising classrooms, laboratories, libraries, workshops, furniture, water supply, electricity, and sporting facilities; as well as instructional resources such as textbooks, computers, internet facilities, laboratory equipment, multimedia technologies, and teaching aids. According to Nwadiani and Ugolo (2011) “physical resources show glaringly that a school is existing in a particular location; and give an instant impression about its quality based on the observed state of architectural fineness”.

Resource development complements planning. It therefore refers to the creation, enhancement, and procurement of resources (such as educational materials, learning tools, human resources, and infrastructure) that support and improve the quality of teaching and learning (Wandera, Kamugisha, Barasa, Nalubega & Mbayo, 2025). It emphasizes the continuous improvement, expansion, maintenance, modernization, and sustainability of these resources to meet the changing demands of quality education. According to Wandera, Kamugisha, Barasa, Nalubega & Mbayo (2025) resource development process would include designing the content, selecting appropriate technology (such as; tablets or online platforms), and providing training for teachers to integrate these modules into their classrooms.

Several scholars have continued to emphasize the importance of school resources as adequate resources enhance effective curriculum implementation, improves classroom instruction, promotes students' motivation to learn, and creates an enabling

environment for academic excellence (Oduru, Basil, Woyengikari, & Christopher, 2024; Igenegbai, & Osagiobare, 2024; Igenegbai, Marchie, 2022). Nwadiani and Ugolo (2011) posited that teachers would become proud and their performance at school increased simply by a modest, beautified, and creative exterior which suggests the purpose why a school building exists. On the flipside, resources inadequacy often results to overcrowded classrooms, poor teaching, limited practical learning experiences, poor instructional supervision, teacher frustration, and declining students' academic achievement (Ewhrudjakpo, & Kpee, 2024). Therefore, effective planning and development of school resources have become indispensable responsibilities of school administrators in their quest to improving the quality of education.

The National Policy on Education emphasizes the need for adequate funding, effective planning, proper management, employment of qualified personnel, and sufficient educational facilities as catalyst for achieving national educational objectives. Furthermore, it posits that educational institutions should provide environments conducive for learning supported by competent teachers, adequate instructional materials, functional infrastructure, and effective administrative leadership (FRN, 2013). These provisions are pointers to the fundamental place of school resource planning and development for the attainment of students' academic achievement and overall improvement of the quality of education in Nigeria. However, earlier studies such as Nwadiani and Ugolo (2011) revealed that of the 1,783 quantities of facilities required by the sampled schools in Bayelsa State, only 843 quantities of facilities were available, which represented 40% adequacy of facilities required. This they rated as grossly inadequate. They revealed that toilet facilities for students were grossly inadequate for use. Only, four schools had functional water closet toilets provided for students. The situation was the same for teachers' toilets, and staffrooms, which recorded only 42.6% and 92.4% adequacy.

The foremost parameter for assessing the quality and effectiveness of education remains students' academic performance. Generally, academic performance connotes the extent to which students achieve expected learning outcomes as measured through classroom assessments, internal examinations, and standardized external examinations. The performance of students in the Senior School Certificate Examination (SSCE) conducted by the National Examinations Council (NECO) and the West African Examinations Council (WAEC) provides objective

measures for assessing students' academic achievement and school effectiveness, in Nigeria. It is very common to hear students, parents, stakeholder, and school administrators describe schools as effective based on past performance of students in WAEC/NECO. The results of external examinations remain a veritable assessment yardstick by governments, educational planners, employers, tertiary institutions, and parents to evaluate the quality of education to make policy decisions.

Several studies have revealed the relationship between resources and students' performance. Madawaki and Abdulkadir (2026), in a study of secondary schools in Katsina State, observed that financial, human and physical resource allocation significantly predicted teaching quality, with human-resource allocation, which include even deployment of teacher and provision of professional development emerged as the major individual factor. Adekunle (2024) revealed that infrastructural facilities have high level contribution to academic performance of secondary school students in external examinations and infrastructural facilities have significant positive relationship with students' academic performance in external examinations.

Ali et al. (2020), examined instructional-material availability and students' academic performance in senior secondary schools in Maiduguri Metropolis, Borno State. Using a correlational design and students' examination results over five consecutive academic sessions, the study reported a significant relationship between the availability of instructional materials and students' academic performance. In the same vein, Azi and Dajan (2022) investigated the use of instructional materials in teaching Economics in Jos-North Local Government Area of Plateau State. Their experimental study found that students exposed to instruction supported by instructional materials performed better than students in the control group. Ibe-Moses et al. (2024) investigated instructional materials and students' performance in Mathematics in public and private secondary schools in Ikenne Local Government Area of Ogun State. The study reinforces the continuing importance of instructional materials in the teaching and learning process.

The imperative of resource development was echoed by Madawaki and Abdulkadir (2026) who found that inadequate maintenance funding could contribute to dysfunctional laboratories and consequently constrain educational delivery. Thus, buttressing the point that resource development should be understood as a continuous process, rather than a one-time provision of resources. Continuous development and planning strategies are imperative.

The government of Bayelsa State has acknowledged the imperativeness of resource planning and development for improved school effectiveness and students' academic performance. Hence, it has put in place several strategies in this regard. These include, the establishment of the Bayelsa State Teacher Training Registration and Certification Board (TTRCB); which regularly train all categories of teachers. According to the TTRCB over 5000 teachers, vice principals, principals, and head masters have been engaged in intensive capacity development training and certification training between 2018-2026. Similarly, the State established the Bayelsa State Education Development Trust Fund (EDTF), which has been responsible for funding and provision of needed resources across all levels of education; basic, secondary, tertiary, technical.

Successive administrations in Bayelsa State have shown massive commitment to investing in education. There has been recruitment of teachers to address deficit in core subject areas, classroom construction, laboratory development, school rehabilitation, and educational reforms. stakeholders continue to express concern over persistent differences in academic performance among public secondary schools. Recent empirical studies conducted within Bayelsa State indicate that the availability and quality of school resources significantly influence students' performance in external examinations (Oduru, Basil, Woyengikari, & Christopher, 2024; Ewhrudjakpo, & Kpee, 2024). Schools with better infrastructural facilities, instructional materials, effective instructional supervision and educational leadership generally demonstrate improved academic outcomes compared with schools characterized by inadequate resources. These findings suggest that the effective planning and management of educational resources may be as important as their availability in determining students' learning outcomes.

Although, previous studies have assessed individual components of school resources, which include; infrastructure, instructional materials, teacher availability and quality, school leadership, and supervision, majority have examined these variables independently. Comparatively, fewer studies have conceptualized school resource planning and development as integrated administrative processes which involve needs assessment, budgeting, procurement, allocation, maintenance, monitoring, evaluation, and continuous improvement. This is in spite of the fact that effective resource planning requires the harmonious coordination of these

components in other to achieve optimal educational outcomes.

Furthermore, it is equally expedient to ascertain the relationship between school resource planning and development on students' performance. This is because performance of students is the most glaring evidence of education quality. Therefore, this study assessed the influence of school resource planning and development on students' academic performance in public secondary schools in Bayelsa State using NECO examination results as the criterion measure of academic achievement.

1.1 Statement of the Problem

The quality of secondary education in Nigeria is often evaluated by students' performance in standardized external examinations. Over the years, the performance of students in senior school certificate examination (SSCE) has remained a major concern to governments, educational planners, school administrators, parents, and other stakeholders. While some public secondary schools consistently record commendable performance, many others continue to experience poor pass rates, especially in core subjects such as English Language and Mathematics. This persistent variation in academic performance raises critical questions about the effectiveness of school management practices and the adequacy of educational resources available in public secondary schools.

Several factors have been advanced to explain students' poor academic performance, including inadequate funding, shortage of qualified teachers, poor instructional supervision, students' socio-economic background, ineffective school leadership, examination malpractice, and lack of parental support. However, one factor that has continued to receive considerable attention is the planning and development of school resources. Effective school resource planning ensures that available human, financial, physical, and instructional resources are strategically identified, allocated, utilized, monitored, and maintained to achieve educational objectives. Similarly, resource development focuses on expanding and improving the quantity and quality of these resources to meet the changing needs of schools. Where these processes are weak or poorly coordinated, the capacity of schools to provide quality teaching and learning is significantly diminished.

The government of Bayelsa State have shown great commitment to improving the state of school resources as well as putting strategic planning and development

mechanisms in place. There has been sustained government investment in education through the construction of school buildings, recruitment of teachers, provision of instructional materials, and implementation of educational reforms. It still remains a puzzle as to the extent of this investment in ensuring school effectiveness. Has the performance of students, especially in external examination like NECO significantly improved? Therefore, this study seeks to assess the link between school resource planning and development and students' academic performance in public secondary schools in Bayelsa State, using NECO examination results as the measure of academic performance.

1.2 Research Questions

The following research questions were raised to guide the study:

- What is the level of school resource development in public secondary schools in Bayelsa State?
- What is the level of students' academic performance based on their NECO examination results in public secondary schools in Bayelsa State?
- What are the major areas of school resource planning in public secondary schools in Bayelsa State?
- What are the major areas of school resource development in public secondary schools in Bayelsa State?
- What is the pattern of students' academic performance based on NECO examination results in public secondary schools in Bayelsa State?

2. Research Methodology

This study adopted a descriptive research design. The population of the study comprised 3631 teachers in public secondary schools as well as NECO examination results of students from 2019-2023 in Bayelsa State. A sample size of 360 teachers was selected using the Taro Yamane formula. The multistage sampling procedure was adopted to select the sampled teachers. Data were collected using two instruments; a researcher designed questionnaire; titled School Resource Planning and Development Questionnaire (SRPDQ) and a proforma; NECO Result Extraction Form (NECO-REF) to determine the areas of School Resource Planning and Development indicators in place, and Students' Academic Performance were measured using the average percentage pass rates of five credits including English

Language and Mathematics in the National Examinations Council (NECO) Senior School Certificate Examination for 2019-2023 academic sessions. The instrument was validated by experts in Educational Management. The internal consistency of the questionnaire items was determined by analyzing data obtained from a pilot test using the Cronbach's alpha coefficient and a reliability coefficient of 0.70

was obtained. Copies of the questionnaire were administered on sampled teachers, while NECO results for 2019-2023 academic sessions were obtained with official approval from relevant authorities. The data collected were coded and analyzed using descriptive statistics; Mean, Percentage, and Ranking.

3. Findings / Results

Research Question One: What is the level of school resource development in public secondary schools in Bayelsa State?

Table 1: Level of School Resource Development in Public Secondary Schools in Bayelsa State.

Resource Category	Respondents	Mean	Remark
Physical Facilities	360	2.72	High
Human Resources	360	3.24	High
Financial Resources	360	2.43	Low
Grand Mean	360	2.80	High

Scale: below 2.5, low, 2.5 and above, high.

Table 1 indicates that the level of school resource development in public schools in Bayelsa State is high with a mean of 2.80. The mean rating indicates that human resources development is highest, followed by physical resources development. Financial resources development is however low.

Research Question Two: What is the level of students' academic performance based on NECO examination results in public secondary schools in Bayelsa State?

Table 2: Percentage of Students with 5 Credits & Above Including English Language & Mathematics in NECO (2019-2023) in public secondary schools in Bayelsa State

Year	Total Candidates	5 Credits & Above Incl. E&M	Percentage	Remark
2019	4764	4494	94	Very High
2020	5455	5039	92	Very High
2021	7843	7428	95	Very High
2022	6736	6129	91	Very High
2023	5528	4762	86	High
Average	30,326	27,852	92	Very High

Scale: 0-49 low, 50-69 moderate, 70-89 high, 90-100 very high.

Table 2 shows that the level of students' academic performance is very high. Specifically, the performance of students remained very high in 2019, 2020, 2021, and 2022 academic sessions. While, in 2023 academic session the performance was high.

Research Question Three: What are the major areas of school resource planning in public secondary schools in Bayelsa State?

Table 3: Major Areas of School Resource Planning in public secondary schools in Bayelsa State

Planning Area	Respondents	Mean	Rank
Needs Assessment	360	3.45	1 st
Budgeting	360	3.22	2 nd
Monitoring & Evaluation	360	2.98	3 rd
Maintenance Planning	360	2.34	4 th

Table 3 presents the major areas of planning as Needs Assessment had (3.45), followed by Budgeting (3.22), Monitoring and Evaluation (2.98). Maintenance planning (2.34) was the least area.

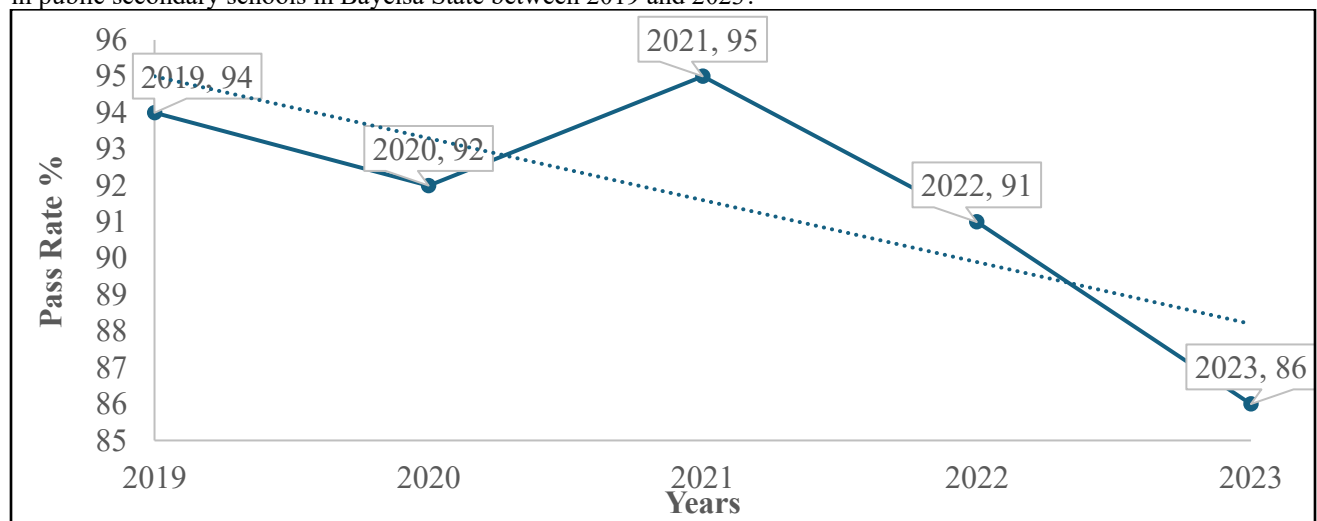
Research Question Four: What are the major areas of school resource development in public secondary schools in Bayelsa State?

Table 4: Major Areas of School Resource Development in public secondary schools in Bayelsa State

Development Area	Respondents	Mean	Rank
Teacher Training	360	3.23	1 st
Teacher Recruitment	360	3.10	2 nd
Classroom Construction/Renovation	360	2.88	3 rd
Provision of Textbooks	360	2.75	4 th
Furniture Provision	360	2.50	5 th
ICT & Internet Facilities	360	1.65	6 th

Table 4 shows the major areas of development in public secondary schools in Bayelsa State. Data indicates teacher training as 1st with a mean of 3.23, followed by teacher recruitment (3.10), classroom construction/renovation (2.88), provision of textbooks (2.75), and provision of furniture (2.50). The provision of ICT and internet facilities is the least area of development with a mean of 1.65.

Research Question Five: What is the pattern of students' academic performance based on NECO examination results in public secondary schools in Bayelsa State between 2019 and 2023?


Figure 1: Pattern of NECO Performance 2019-2023

The data in Figure 1 indicates a non-consistent pattern in students' performance, not strictly upward or downward trend. The performance moved downward from 2019 to 2020 at 94% pass to 92%. However, it moved upward to 95% in 2021, which is the year with the highest performance rate. There was again a downward trend from 2022 at 91% and consistently to 2023 at 86%, which was the year with the least performance rate.

4. Discussion of Findings

The study examined school resource planning and development and students' academic performance in public secondary schools in Bayelsa State. The findings revealed that the level of school resource development in public schools in Bayelsa State is high with a mean of 2.80. The mean scores of the various indicators of school resource development, which include human resources development and physical resources development were high. This suggests that

priority is given to the availability, deployment, training, and welfare of teachers in public secondary schools in Bayelsa State. This is equally the situation of physical resources. The findings indicate a departure from the state of neglect revealed by Nwadiani and Ugolo (2011) that the situation of resources in Bayelsa State public secondary schools was grossly inadequate. Financial resources development is however low. This indicates that the provision of finance for school heads and teachers to carry out administrative and sundry tasks (impress) is poorly executed.

On the level of students' academic performance in public secondary schools in Bayelsa State, the findings revealed that it is very high. This means that majority of students who finish from public secondary schools in Bayelsa State had the requisite credit passes in five subjects to advance for further studies. This finding is very exciting because Bayelsa State has been classified as an educationally disadvantaged state in

Nigeria. Hence, the very high performance of students as shown from their performance in a national examination (NECO) indicates that a lot has been achieved educationally in Bayelsa State. This can be linked to the level of resource development in the state, as the adequacy of resources makes teachers become proud and their performance at school increased simply by a modest, beautified, and creative exterior which suggests the purpose for a school building to exist (Nwadiani & Ugolo, 2011). The availability and quality of school resources significantly influence students' performance in external examinations (Oduru, Basil, Woyengikari, & Christopher, 2024; Ewruhjakpo, & Kpee, 2024)

The findings further revealed the major areas of planning as; needs assessment, followed by budgeting, monitoring and evaluation as well as maintenance planning. This indicates that a concerted effort at ensuring a very organized and result oriented process is put in place. Several agencies and directorates in these areas have been put in place to ensure consistency. These include; the Education Development Trust Fund (EDTF) for budgeting and financing, the Directorate of Supervision, for monitoring and evaluation of the school process, among others.

Furthermore, the findings indicated the major areas of development in public secondary schools in Bayelsa State to include; teacher training, teacher recruitment, classroom construction/renovation, provision of textbooks, and provision of furniture. The establishment of the Teachers Training Registration and Certification Board (TTRCB), which continue to engage teachers for intensive capacity development training has become a culture among teachers. Teachers have moved from the point of resistance and unwillingness to participate in capacity development training in Bayelsa State to looking forward to it. This is same for recruitment of qualified teachers to fill vacant positions in schools across the state. This is same in the areas of provision of physical infrastructures. However, little has been achieved in making public schools ICT and internet compliant. Although, the State Basic Education Board (SUBEB) introduced the Bayelsa Prime, which involved the use of ICT enabled gadgets for teaching and monitoring. This has not been extended to secondary schools, even though teachers have received trainings on ICT at different intervals.

On the pattern of students' academic performance, the findings indicated an inconsistent pattern /trend in the performance of students across the five years under review. Although, the performance remained high, as even 2023 (the year with the least percentage

performance) recorded 86% performance, this trend gives some concern. This is because, the goal is to maintain and improve on the performance of students' year after year and not to move from very high to high and maybe unfortunately, back to low if care is not taken.

5. Conclusion

Based on the findings of the study, it is concluded that the level of academic performance of students in public secondary schools in Bayelsa State is very high. Furthermore, it was concluded that school resource planning and development influence students' academic performance.

6. Recommendations

The following recommendations are put forward on the bases of its findings:

- The high level of school resource development should be maintained and improved upon, especially on the aspect of financial resource development. The practice of provision of funds for administrative operations in school should be adequately catered for.
- The level of academic performance should be maintained and improved upon. Resources should be made available and in appropriate proportion to stimulate teachers and students to achieve their best always.
- The areas of school resource planning should be expanded. Agencies should be created or existing agencies should be given mandates on these major areas. This will enhance efficiency.
- There should be improvement in the areas of resource development, especially on ICT and internet facilities provision. ICT & internet has become the medium for external examinations; therefore, they must be available for students and teachers use.
- The pattern of students' academic performance needs to move upward or remain at equilibrium, always. Therefore, resources planning and development must be given more attention as it influences and determines performance.

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