

STUDENTS' SERVICES MANAGEMENT AND SUSTAINABLE LEARNING ENVIRONMENT IN PUBLIC SENIOR SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA

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ABSTRACT

This study investigated students' services management and sustainable learning environment in public senior secondary schools in Rivers State, Nigeria. A correlational research design was adopted. The population comprised 5,833 teachers in 320 public senior secondary schools, from which 400 teachers were selected through multistage sampling. Data were collected using two researcher-developed instruments: Students' Services Management Assessment Scale (SSMAS) and Sustainable Learning Environment Assessment Scale (SLEAS). The SSMAS contained 49 items across seven clusters: ICT, data, security, disciplinary, health, sports, and guidance and counselling services management, while the SLEAS contained 15 items. The instruments were validated by experts, with Cronbach's alpha coefficients of 0.84 and 0.81, respectively. Of the 400 questionnaires administered, 383 were retrieved and 378 valid copies, representing 95%, were analysed. Pearson Product-Moment Correlation Coefficient was used to answer Research Questions 1–7 and test the corresponding hypotheses using a t-test, while multiple regression and associated ANOVA were used for Research Question 8 and Hypothesis 8 at the 0.05 level of significance. Findings revealed significant relationships between students' services management dimensions and sustainable learning environment, with varying contributions across the dimensions. The study concluded that effective students' services management is essential for sustaining a safe, inclusive, supportive, and conducive learning environment. It recommended strengthening ICT, data, security, and other student support services in public senior secondary schools.

KEYWORDS: Students' Services Management, Sustainable Learning Environment, ICT Services, Data Management, Security Services, Public Senior Secondary Schools

INTRODUCTION

A sustainable learning environment is an educational setting that is deliberately designed, managed, and maintained to support enduring learning outcomes while promoting environmental responsibility, social inclusion, resource efficiency, and the overall well-being of learners and the wider school community. It encompasses not only the physical infrastructure of the school but also the systems, policies, relationships, and practices that facilitate effective teaching and learning. UNESCO (2022) emphasises that sustainability in education integrates ecological, social, and educational considerations to ensure that learning institutions remain responsive and resilient to changing societal and environmental conditions. Thus, a sustainable learning environment extends beyond the provision of classrooms and instructional facilities to include the creation of safe, inclusive, healthy, supportive, and resource-efficient conditions that enable students to learn effectively and participate meaningfully in school life.

An important mechanism through which such an environment can be achieved is students' services management. Students' services management refers to the systematic planning, organisation, coordination, provision, and evaluation of non-instructional services designed to support students' academic, social, emotional, physical, and developmental needs. These services include information and communication technology (ICT), data management, security, disciplinary services, health services, sports and recreation, and guidance and counselling, among others. According to Okeke and Ezeugbor (2023), student personnel services management involves the strategic coordination of supportive services that promote students' welfare, retention, adjustment, and holistic development. Similarly, Akinnubi and Kayode, as cited in Akinnubi and Alabi (2021), observe that student services are designed to address students' socio-academic needs, reduce antisocial behaviours, and provide appropriate support for problems that may hinder academic pursuits and future career development. Consequently, effective students' services management can provide the conditions necessary for students to feel safe, supported, included, and adequately prepared for learning.

The relevance of student services management to a sustainable learning environment is particularly evident in public senior secondary schools, where students' learning experiences are shaped not only by classroom instruction but also by the availability and quality of

support services. Effective management of student services requires adequate funding, competent personnel, clear policies, appropriate facilities, collaborative leadership, and continuous monitoring of students' changing needs. Properly managed services can enhance students' welfare, promote responsible behaviour, improve access to learning resources, strengthen school safety, support physical and psychological well-being, and facilitate effective participation in school activities. Nwagwu (2022) therefore identifies student services as an important component of creating a sustainable learning environment and promoting students' sense of belonging, academic outcomes, and institutional effectiveness. The present study consequently focuses on selected dimensions of students' services management, namely ICT services management, data management, security services management, disciplinary services management, health services management, sports services management, and guidance and counselling services management.

Students' ICT services management involves the planning, organisation, coordination, maintenance, and evaluation of technological resources and support systems provided to students for learning and school-related activities. Such services include computers, internet facilities, digital learning platforms, and technical support. Effective management of ICT services can enhance equitable access to learning resources, facilitate collaborative and student-centred learning, improve administrative processes, and reduce dependence on paper-based systems, thereby supporting both educational quality and resource sustainability (Selwyn, 2020).

Data management involves the systematic collection, organisation, storage, protection, retrieval, and utilisation of students' academic, behavioural, and demographic information. Effective data management enables school leaders and teachers to make evidence-based decisions, monitor students' progress, identify learning difficulties, improve accountability, and reduce cumbersome paper-based processes (OECD, 2020; World Bank, 2020). These functions can strengthen the efficiency, responsiveness, and long-term sustainability of the learning environment.

Similarly, security services management encompasses the planning, coordination, and supervision of measures designed to protect students, staff, and school property from physical, emotional, and environmental threats. Effective security services can provide students with a safe and stable environment in which fear, violence, bullying, and other disruptions are minimised, thereby supporting attendance, concentration, participation, and well-being (UNESCO, 2017; WHO, 2019).

Against this background, the management of students' services constitutes an important administrative responsibility for school leaders seeking to establish and sustain learning environments that are safe, inclusive, supportive, efficient, and responsive to students' needs. However, the extent to which these services are adequately managed and their relationship with sustainable learning environments in public senior secondary schools in Rivers State remains an issue requiring empirical examination. It is against this concern, this study investigated students' services management and sustainable learning environment in public senior secondary schools in Rivers State, Nigeria, with particular attention to ICT services management, data management, and security services management

Statement of the Problem

The situation in many public senior secondary schools in Rivers State appears worrisome, as students may be expected to learn effectively in environments where essential support services are inadequately managed, poorly coordinated, or inconsistently provided. In some schools, students may encounter limited access to functional ICT facilities, poorly managed records, inadequate security arrangements, ineffective disciplinary systems, insufficient health services, limited sports and recreational opportunities, and weak guidance and counselling support. These deficiencies can create learning environments characterised by insecurity, poor student welfare, disorder, exclusion, and reduced access to essential learning resources, thereby threatening the sustainability of the school environment. More disturbing is the possibility that when students' non-instructional needs are continually overlooked, the school may struggle to maintain an environment capable of supporting students' academic, social, emotional, and physical development over time. Although students' services management is expected to provide the support structures necessary for a safe, inclusive, healthy, orderly, and productive learning environment, the extent to which these services are effectively managed in public senior secondary schools in Rivers State remains uncertain. This situation raises a critical concern: can a learning environment truly be considered sustainable when the essential services that support the students who occupy it are inadequately managed? It is this concern that necessitates an empirical investigation into the relationship between students' services management and sustainable learning environment in public senior secondary schools in Rivers State, Nigeria.

Aim and Objectives of the Study

This study examined the relationship between students' services management and sustainable learning environment in senior public secondary schools in Rivers State. The objectives of the study sought to;

1. Determine the relationship between ict services management and sustainable learning environment in public senior secondary schools in rivers state.
2. Ascertain the relationship between data management services and sustainable learning environment in public senior secondary schools in rivers state.
3. Find out the relationship between security services management and sustainable learning environment in public senior secondary schools in rivers state.

Research Questions

The following research questions guided the study:

1. What is the relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State?
2. What is the relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State?
3. What is the relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State?

Hypotheses

The following hypotheses were tested at a 0.05 level of significance.

1. There is no significant relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State.
2. There is no significant relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State.
3. There is no significant relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State.

METHODOLOGY

The study adopted a correlational research design to examine the relationship between Students' Services Management and Sustainable Learning Environment in public senior secondary schools in Rivers State. The population comprised 5,833 teachers in 320 public senior secondary schools, from which 400 teachers were selected through a multistage sampling technique involving the three Senatorial Districts, six randomly selected LGAs, 32

proportionately selected schools, and proportionate allocation of respondents. Data were collected using two researcher-developed instruments: Students' Services Management Assessment Scale (SSMAS), comprising 21 items across 3 clusters-ICT, data, and security and Sustainable Learning Environment Assessment Scale (SLEAS), comprising 15 items, both structured on a 4-point Likert scale. The instruments were subjected to face and content validation by experts, while Cronbach's alpha yielded reliability coefficients of 0.84 for SSMAS and 0.81 for SLEAS, with subscale coefficients ranging from 0.76 to 0.86. With the assistance of three research assistants, 400 questionnaires were administered, 383 were retrieved, and 378 valid copies (95%) were used for analysis. Pearson Product-Moment Correlation Coefficient (PPMC) was used to answer Research Questions 1–3 and test their corresponding hypotheses using t-test at the 0.05 level of significance.

RESULTS AND ANALYSIS

Research Question 1: What is the relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State?

Table 1: Pearson Product-Moment Correlation (PPMC) showing the Relationship between ICT Services Management and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	n	df	r	Decision
ICT Services Management	378	376	0.272	Very Weak Relationship
Sustainable Learning Environment	378			

Decision Rule: 0.00 – 0.25 Very Weak, 0.26 – 0.50 Weak, 0.51 – 0.75 Strong, 0.76 – 1.00 Very Strong.

To address Research Question 1, the result in Table 1 shows a Pearson correlation coefficient ($r = 0.272$), indicating a very weak positive linear relationship between ICT services management and a sustainable learning environment in public senior secondary schools in Rivers State. This coefficient suggests that approximately 27% of the maximum possible positive relationship exists between the two variables, reflecting a low-strength relationship. Hence, there is a very weak relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State.

Research Question 2: What is the relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State?

Table 2: Pearson Product-Moment Correlation (PPMC) showing the Relationship between Data Management Services and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	n	df	r	Decision
Data Management Services	378	376	0.673	Strong Relationship
Sustainable Learning Environment	378			

Decision Rule: 0.00 – 0.25 Very Weak, 0.26 – 0.50 Weak, 0.51 – 0.75 Strong, 0.76 – 1.00 Very Strong.

To address Research Question 2, the result in Table 2 shows a Pearson correlation coefficient ($r = 0.673$), indicating a strong positive linear relationship between data management services and a sustainable learning environment in public senior secondary schools in Rivers State. This coefficient suggests that approximately 67% of the maximum possible positive relationship exists between the two variables, reflecting a very strong relationship. Hence, there is a strong relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State.

Research Question 3: What is the relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State?

Table 3: Pearson Product-Moment Correlation (PPMC) showing the Relationship between Security Services Management and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	n	df	r	Decision
Security Services Management	378	376	0.211	Very Weak Relationship
Sustainable Learning Environment	378			

Decision Rule: 0.00 – 0.25 Very Weak, 0.26 – 0.50 Weak, 0.51 – 0.75 Strong, 0.76 – 1.00 Very Strong.

To address Research Question 3, results from Table 3 produced a correlation coefficient, 'r' of 0.211, which by percentage is 21%. This value shows there is a very weak relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State.

Thus, there is a strong relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State.

Test of Hypotheses

Hypothesis 1: There is no significant relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State.

Table 9: t-test for the Pearson Product-Moment Correlation Coefficient on the Relationship between ICT Services Management and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	N	df	r	p-value	alpha level	Decision
ICT Services Management Sustainable Learning Environment	378 378	376	0.272	0.675	0.05	Fail to Reject H_{01} (Not Significant)

For Hypothesis 1, the result in Table 9 reveals a weak positive linear relationship between ICT services management and a sustainable learning environment ($r = 0.272$). However, this relationship is not statistically significant at the 0.05 level, as the p-value ($p = 0.675$) exceeds the specified alpha level of 0.05.

Accordingly, the null hypothesis was not rejected, indicating that ICT services management does not have a statistically significant relationship with a sustainable learning environment in public senior secondary schools in Rivers State.

Hence, there is no significant relationship between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State.

Hypothesis 2: There is no significant relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State.

Table 10: Test of Hypothesis on the Relationship between Data Management Services and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	n	df	r	p-value	alpha level	Decision
Data Management Services Sustainable Learning Environment	378 378	376	0.673	0.001	0.05	Fail to Accept H_{02} (Significant)

For Hypothesis 2, the result in Table 10 reveals a strong positive linear relationship between data management services and a sustainable learning environment ($r = 0.673$). However, this

relationship is statistically significant at the 0.05 level, as the observed p-value ($p = 0.001$) does not exceed the specified alpha level of 0.05.

Consequently, the null hypothesis is rejected, indicating that data management services exert a statistically significant relationship with a sustainable learning environment in public senior secondary schools in Rivers State.

Hence, there is a significant relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State.

Hypothesis 3: There is no significant relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State.

Table 11: Test of Hypothesis on the Relationship between Security Services Management and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

Variables	n	df	r	p-value	alpha level	Decision
Security Services Management Sustainable Learning Environment	378 378	376	0.211	0.712	0.05	Fail to Reject H_{03} (Not Significant)

For Hypothesis 3, the result in Table 11 reveals a weak positive linear relationship between security services management and a sustainable learning environment ($r = 0.211$). However, this relationship is not statistically significant at the 0.05 level, as the observed p-value ($p = 0.712$) exceeds the specified alpha level of 0.05.

Consequently, the null hypothesis was not rejected, indicating that security services management does not have a statistically significant relationship with a sustainable learning environment in public senior secondary schools in Rivers State.

Hence, there is no significant relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State.

Discussion of Findings/Implications

The Relationship Between ICT Services Management and a Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State

The first finding of the study revealed a very weak relationship between ICT services management and a sustainable learning environment in public senior secondary schools in Rivers State. Also, a corresponding hypothesis tested establishes no significant relationship

between ICT services management and sustainable learning environment in public senior secondary schools in Rivers State. These findings contradict Alabi and John (2023), Ibe and Ekwueme (2024), and Lawal and Peters (2024), whose studies showed that a weak and insignificant relationship exists between ICT services management and sustainable learning environment in public schools. However, the findings are in line with UNESCO (2017), Selwyn (2020), and World Bank (2020), who affirmed of no significant link between ICT services management and sustainable learning environment in most public schools in Nigeria. A possible further explanation of these findings is that, although ICT services management is conceptually linked to the promotion of a sustainable learning environment, its practical impact in public senior secondary schools in Rivers State remains minimal due to prevailing systemic constraints. The weak and non-significant relationship observed may be attributed to inadequate funding, which limits the acquisition, maintenance, and upgrading of ICT facilities; poor infrastructural conditions that restrict effective utilisation of available technologies; and unreliable electricity supply that disrupts consistent ICT usage. In addition, limited broadband connectivity reduces access to digital learning resources, while the shortage of trained ICT personnel undermines proper management, integration, and pedagogical use of ICT services. Consequently, these challenges collectively constrain the capacity of ICT services management to meaningfully contribute to a sustainable learning environment in the studied schools, thereby explaining the weak relationship and the rejection of the corresponding hypothesis. This implies that policy and investment efforts must prioritise resolving systemic and infrastructural deficiencies before ICT services management can meaningfully enhance sustainability in public senior secondary school learning environments in Rivers State. The implication of this is that effective students' services management must be strengthened independently of ICT systems, as reliance on weak ICT services alone cannot adequately support students' learning needs or sustain the school environment.

The Relationship between Data Management Services and Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State.

The second finding of the study revealed a strong relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State. Also, a corresponding hypothesis tested establishes a significant relationship between data management services and sustainable learning environment in public senior secondary schools in Rivers State. These findings disagree with UNESCO (2019), Selwyn (2021), and

Murphy and Smith (2022), whose studies revealed that no significant relationship exists between data management services and sustainable learning environment in public schools. However, the findings are in agreement with the scholarly works of Murray and Nduka (2022), Uzoechina and Bello (2023), and Haruna and Ibrahim (2023), which affirmed a strong and significant relationship exist between data management services and sustainable learning environment in public schools.

A possible further explanation of these findings is that the strong and significant relationship between data management services and a sustainable learning environment in public senior secondary schools in Rivers State reflects the growing adoption and effective use of ICT-supported data practices by schools and teachers. The use of data management services for students' record keeping, attendance monitoring, assessment documentation, and administrative planning enhances efficiency, accuracy, accountability, and continuity in school operations. As teachers and school administrators increasingly utilise ICT facilities and electronic devices for managing educational data, decision-making becomes more informed and timelier, resource allocation improves, and learning processes are better monitored. Consequently, effective data management services contribute directly to sustaining an organised, responsive, and supportive learning environment, thereby explaining the observed strong and significant relationship. The implication of this is that strengthening students' services management through effective data-driven practices enhances the provision, monitoring, and sustainability of student support services in public senior secondary schools.

The Relationship Between Security Services Management and a Sustainable Learning Environment in Public Senior Secondary Schools in Rivers State

The third finding of the study revealed a very weak relationship between security services management and a sustainable learning environment in public senior secondary schools in Rivers State. Also, a corresponding hypothesis tested establishes no significant relationship between security services management and sustainable learning environment in public senior secondary schools in Rivers State. These findings align with Katherine (2022), Ugochi and Asika (2023), and Oyinloye (2024), whose empirical works showed that security services management does not significantly relate to a sustainable learning environment in public schools.

A possible further explanation of these findings reflects the persistent and widespread security challenges confronting schools in the state and Nigeria at large. In many schools,

security services are poorly managed, underfunded, or inadequately coordinated, making them ineffective in preventing or responding to threats such as student kidnappings, violent attacks, and the impact of natural disasters like flooding. These recurring security issues disrupt academic activities, create fear and instability, and undermine the continuity of teaching and learning processes. Consequently, the limited effectiveness of security services management reduces its capacity to significantly contribute to a sustainable learning environment, thereby explaining the weak relationship and the non-significant hypothesis result. The implication of this is that students' services management must prioritise safety, welfare, and crisis-response mechanisms beyond existing security structures to ensure students' well-being and continuity of learning despite prevailing security challenges.

CONCLUSION

The study concludes that effective management of students' services is essential for fostering a safe, inclusive, supportive, and sustainable learning environment in public senior secondary schools in Rivers State. Therefore, school authorities should prioritise the effective provision, coordination, and continuous improvement of students' services to enhance the sustainability and quality of the school learning environment.

RECOMMENDATIONS

In light of the findings and conclusions of this study, the following are recommended:

1. The Government of Rivers State should invest in upgrading ICT infrastructure, provide regular training for teachers, and integrate technology into administrative and teaching processes to strengthen the weak relationship between ICT management and a sustainable learning environment.
2. School management should continue to prioritise effective data management practices, including accurate record-keeping, monitoring student performance, and using data for informed decision-making, as this strongly contributes to sustaining a conducive learning environment.
3. School authorities should work with police and local security personnel to implement comprehensive security measures, such as employing trained security personnel, installing surveillance systems, and developing emergency response plans, to improve the weak impact of security services on learning sustainability.

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