



INSTITUTIONAL IMPROVEMENT STRATEGIES AND PUBLIC SECONDARY SCHOOLS' EFFECTIVENESS IN CALABAR EDUCATION ZONE, CROSS RIVER STATE, NIGERIA

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ABSTRACT

The study examined the relationship between institutional improvement strategies and the effectiveness of public secondary schools in the Calabar Education Zone of Cross River State, Nigeria. It was guided by two null hypotheses. A correlational research design was adopted for the study. The population comprised all 95 public secondary schools in Calabar Education Zone, Cross River State, and the census sampling technique was employed. A validated instrument titled: Institutional Improvement Strategies and Secondary School Effectiveness Questionnaire (IISSES) were used for data collection. It was validated by research experts in Educational Management, Measurement and Evaluation Unit, Cronbach Alpha method was used to determine the internal consistency of the instrument and it yielded a reliability coefficient index of .83 level of reliability which indicated that the instrument was good for the study. Data collected were analyzed using Pearson Product Moment Correlation Analysis. The findings revealed that both school facilities management and staff development programmes have significant positive relationships with school effectiveness. Based on these findings, the study concludes that institutional improvement strategies play a vital role in enhancing the effectiveness of public secondary schools. It was recommended that school administrators should prioritize effective management of school facilities by ensuring regular maintenance, proper utilization, and adequate provision of physical and instructional resources to create a conducive learning environment.

Keywords: Institutional Improvement, Strategies, Facilities Management, Staff Development, Secondary School Effectiveness.

Introduction

Public secondary schools are a vital part of the formal education system, serving as a link between basic education and higher education or vocational pursuits. These schools are established and funded by government authorities to provide accessible, equitable, and standardized education to adolescents, typically between the ages of 11 and 18 years. In Nigeria, public secondary schools are expected to play a significant role in achieving national educational objectives by equipping students with essential values, moral principles, functional skills, competencies, and capacities needed for meaningful living (Difoni et al., 2025). Beyond academic instruction, secondary education aims to promote students' moral, social, and intellectual development, enabling them to adapt effectively to an ever-changing world (Obona et al., 2024). As noted by Edim et al. (2024), secondary schools are also expected to enhance knowledge acquisition, critical thinking, and character formation necessary for future academic and societal contributions. In the same vein, Difoni et al. (2024) stress the importance of



providing an inclusive learning environment supported by adequate resources to ensure students' success. Consequently, graduates of secondary schools are expected to possess the competencies required for further education or gainful employment (Etor et al., as cited in Obona et al., 2024). However, despite their significance, public secondary schools continue to face challenges such as inadequate funding, poor infrastructure, and issues related to teacher quality and management, all of which can hinder effective service delivery and the attainment of educational goals.

School effectiveness refers to the extent to which a school successfully achieves its stated educational goals and objectives through the efficient use of available human and material resources. In contrast, school ineffectiveness denotes the inability of a school to realize these goals, particularly in terms of delivering quality instruction, providing supportive learning environments, and achieving desirable learning outcomes. Effective schools are characterized by conducive learning environments, sound instructional practices, and strong leadership and management systems that support both teachers and students. Additional indicators of school effectiveness include high student academic achievement, the presence of qualified and dedicated teachers, effective instructional supervision, and the availability and proper use of teaching and learning facilities.

Secondary school ineffectiveness has been widely documented across multiple dimensions by scholars. Ineffective schools are often characterized by consistently poor student performance, the use of outdated teaching methods, and learning environments that fail to adequately support students' social, emotional, and cognitive development (Dilie & Kumari, 2022). These challenges are largely attributed to systemic issues such as inadequate funding, weak policy implementation, and ineffective monitoring mechanisms. Although education is globally recognized as a key driver of socio-economic, human, and political development (Difoni et al., 2025), educational reforms in Nigeria are often poorly implemented, resulting in a disconnect between policy intentions and actual outcomes (Okolie & Igwe, 2021). At the societal level, these shortcomings contribute to increasing inequality, intergenerational poverty, and rising youth unemployment, which in turn intensify insecurity and social instability (Ibrahim & Abdulkareem, 2022; Ezeoke et al., 2024). Furthermore, growing concerns about declining job performance among secondary school teachers in Nigeria underscore the urgent need for effective supervision and monitoring to ensure compliance with professional standards (Madukwe et al., as cited in Okafor et al., 2024; Okafor et al., 2024).

From the researcher's observation, the challenges of school effectiveness are particularly pronounced in the Calabar Education Zone of Cross River State. These challenges are evident in poor instructional delivery, low teacher commitment, and weak school leadership. In addition, many schools operate in unconducive learning environments that hinder effective teaching and learning. The combined effect of these conditions is reflected in poor learning outcomes, as many students struggle to meet minimum academic standards. Institutional improvement strategies can address school ineffectiveness.

Institutional improvement strategies refer to deliberate actions, reforms, and policies designed to strengthen the organizational capacity of schools, enhance teaching and learning processes, and promote accountability (Amadi & Oko, 2023). These strategies help to address school ineffectiveness by improving leadership practices, building teachers' capacity, ensuring efficient use of resources, and creating supportive learning environments that foster improved



educational outcomes. At the core of these efforts is effective school administration, which entails the coordinated management of students, staff, policies, and institutional regulations (Madukwe et al., 2024).

In this study, the key institutional improvement strategies examined are school facilities management and staff development programmes, both of which are recognized as critical determinants of school effectiveness. By prioritizing these strategies, educators and policymakers can create conducive learning environments, improve instructional delivery, and enhance the overall effectiveness of secondary education.

Literature review

School Facilities management and School Effectiveness

Facilities in educational institutions encompass a wide range of physical and instructional resources, including school buildings, classrooms, hostels, libraries, laboratories, furniture, recreational equipment, and teaching materials. The effective management of these facilities is increasingly recognized as a strategic mechanism for promoting sustainability in educational institutions. Radebe and Ozumba (2021) observed that both the availability and proper management of facilities play a critical role in advancing sustainability initiatives through improved campus planning, environmental management, and efficient resource utilization. In a similar vein, Obona et al. (2024) argued that prudent management of educational resources reduces wastage, lowers operational costs, and enhances both academic and administrative efficiency. School facilities development, therefore, involves the provision, utilization, and maintenance of physical infrastructure—such as classrooms, laboratories, libraries, and recreational spaces—that directly support teaching and learning processes (Akomolafe & Adesua, 2016; Ataine & Nkedishu, 2017). A well-maintained and conducive physical learning environment is widely acknowledged as essential for effective instructional delivery and improved learning outcomes.

Empirical evidence from Nigeria and other parts of the world consistently indicates a strong positive relationship between the availability, adequacy, and quality of school facilities and students' academic performance (Njideka et al., 2022; Uchenna et al., 2024; Ezeoke et al., 2024). Additional Nigerian studies (Oladipo & Oni, 2022; Ibrahim & Abdulkareem, 2022; Olayinka & Adeyemi, 2022; Dada & Bello, 2022) provide substantial quantitative support linking well-managed infrastructure to improved performance in external examinations such as WAEC, as well as overall school effectiveness. Furthermore, studies by Yasin et al. (2017), Uko (2015), Thomas and Amachi (2019), and Osuji (2016) highlight the importance of effective facility management and infrastructural planning in strengthening quality assurance, record-keeping practices, and instructional efficiency.

Nyamai et al. (2024), employing a convergent parallel mixed-methods design, found that the effective utilization of physical facilities—particularly classrooms and laboratories—significantly enhanced students' academic achievement in free day secondary schools in Mombasa County. However, the study also revealed that inadequate provision and underutilization of ICT facilities limited optimal academic performance. Similarly, Umar (2023) reported that effective management of financial and time resources significantly influenced school effectiveness in public secondary schools in Edo South Senatorial District. Evidence from international contexts, including Israel, Malaysia, Rwanda, Kenya, and the



United States, further supports the conclusion that well-equipped laboratories, functional libraries, adequate classroom spaces, and modern instructional resources contribute significantly to improved learning outcomes (Arar & Abo-Nasrah, 2018; Abbas et al., 2017; Feng & Ha, 2016; Ntahomvukiye & Cyprien, 2024). Nevertheless, some studies point to persistent challenges such as inadequate provision, poor utilization, and weak maintenance of facilities, all of which undermine school effectiveness. In addition, ineffective application of routine, preventive, corrective, and emergency maintenance strategies by school administrators has been identified as a major constraint to institutional effectiveness (Chimekwele & William-Yobo, 2021; Onuh et al., 2021).

Staff development programmes and School Effectiveness

Staff development programmes represent structured capacity-building initiatives designed to equip personnel with the knowledge, skills, competencies, and professional capabilities required to function effectively in dynamic educational environments. These programmes typically include activities such as on-the-job training, refresher courses, workshops, seminars, conferences, mentoring, coaching, study fellowships, and delegated responsibilities (Ekpoh et al., 2013; Asuquo et al., 2023). The quality of teaching staff remains a critical determinant of educational sustainability and the successful integration of learners into society (Owan, 2019). Consequently, continuous professional development is essential for enhancing staff capacity, meeting evolving pedagogical demands, and maintaining global competitiveness in education systems (Asuquo et al., 2023).

Within educational systems, staff development programmes serve to improve existing competencies while facilitating the acquisition and transfer of new knowledge necessary for institutional growth and sustainability (Asuquo et al., 2023). Training plays a fundamental role in enhancing job performance, promoting efficiency, and preparing employees for changing roles within the organization. Beyond immediate skill acquisition, such programmes also develop staff for future leadership and administrative responsibilities by deepening their understanding of how various components of the educational system are interconnected. Empirical studies provide strong support for the positive impact of staff development on institutional effectiveness. Ekpoh et al. (2013) found that teachers who participated in professional development programmes demonstrated higher productivity compared to those who did not. Similarly, Asuquo et al. (2023), in a survey of public secondary schools in Cross River State, identified diverse staff training needs, multiple training approaches, and several constraints affecting effective implementation. The study concluded that well-designed training and development programmes are vital for enhancing staff performance and sustaining educational institutions.

Evidence from other sectors also reinforces the importance of staff development. Aboyassin and Sultan (2017), in their study of five-star hotels in Jordan, established a positive relationship between employee training and key performance indicators such as productivity, service quality, and job satisfaction, highlighting the broader organizational relevance of capacity building. In the educational sector, Obona et al. (2025) found a significant relationship between administrators' financial management strategies and school effectiveness in Cross River State, underscoring the complementary role of managerial competence and staff capacity in sustaining educational systems. Further empirical support is provided by Madukwe et al.



(2024), who reported that in-service training, seminar participation, and conference attendance significantly contributed to sustainable school administration in the Calabar Education Zone. Similarly, Hervie and Winful (2018), in a study conducted within the Ghana Education Service, identified inadequate in-service training, insufficient instructional materials, low motivation, and weak supervision as key factors contributing to poor teacher performance. At the tertiary level, Lambrechts et al. (2017) examined the relationship between professional development and organizational change for sustainability in higher education institutions in Flanders, Belgium. Their findings indicated that professional development initiatives framed within organizational change processes—particularly those emphasizing staff empowerment—enhanced the integration of sustainability competencies. The study further emphasized that staff development programmes are most effective when aligned with broader institutional sustainability goals.

The reviewed literature underscores the significant roles of school facilities management and staff development programmes in enhancing school effectiveness. Despite these contributions, important gaps remain in the existing body of knowledge. A considerable number of the studies were conducted in different states within Nigeria and in international contexts, thereby limiting their direct applicability to the local setting. In addition, many of these studies employed diverse research designs that differ from the correlational approach adopted in the present study, making comparisons less precise. More so, there is a paucity of empirical studies that specifically examine institutional improvement strategies in relation to the effectiveness of public secondary schools within the Calabar Education Zone of Cross River State. This contextual gap highlights the need for localized research that reflects the unique educational realities of the area. Consequently, this study is designed to address this gap by investigating the relationship between institutional improvement strategies and public secondary school effectiveness in the Calabar Education Zone, thereby contributing to the growing body of knowledge in this field.

Statement of the problem

Public secondary schools in Calabar Education Zone, Cross River State continue to experience considerable levels of ineffectiveness, particularly in areas such as instructional delivery, quality of the learning environment, and students' academic outcomes. Observations by the researcher indicate a persistent reliance on outdated teaching methods, inadequate instructional materials, and low levels of student engagement. The situation is worsened by overcrowded classrooms, limited opportunities for teacher training, poorly ventilated learning spaces, and inadequate access to educational technology. Collectively, these challenges may hinder students' academic achievement, limit their personal development, and reduce their capacity to contribute meaningfully to societal growth if not immediately addressed.

In an effort to address these issues, the state government has implemented several measures, including regular payment of teachers' salaries, renovation of school facilities, and improved supervisory practices. However, despite these interventions, the problems persist. This suggests that existing strategies may be inadequate or poorly executed. Against this backdrop, this study seeks to examine the relationship between institutional improvement strategies and the effectiveness of public secondary schools in the Calabar Education Zone, Cross River State. Consequently, the central research question guiding this study is: What is the relationship between institutional improvement strategies and public secondary school effectiveness in the Calabar Education Zone, Cross River State, Nigeria?



Purpose of the study

The general purpose of this study was to examine institutional improvement strategies and public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria. Specifically, the study seeks to investigate the relationship between:

1. School facilities management and school effectiveness
2. Staff development programmes and school effectiveness.

Statement of hypotheses

The following hypothesis guided the study:

1. School facilities management do not significantly relate to public secondary school effectiveness.
2. Staff development programmes do not significantly relate to public secondary school effectiveness.

Research methodology

The study employed a correlational research design. This was to enable an examination of the relationship between institutional improvement strategies and public secondary school effectiveness in the Calabar Education Zone, Cross River State, Nigeria. The population of this study comprises all the 95 public secondary schools in Calabar Education Zone, Cross River State which is made up of seven Local Government Areas (Secondary Education Board, Cross River State, 2026). The census approach was adopted, involving all schools without sampling. This method was considered appropriate due to the manageable population size, accessibility of schools, and availability of resources, while also eliminating sampling bias.

Data were collected using a researcher-designed questionnaire titled “Institutional Improvement Strategies and Secondary School Effectiveness Questionnaire (IISSES). The instrument contained two sections: Section A assessed institutional improvement strategies, while Section B measured secondary school effectiveness using a 4-point Likert scale. The questionnaire was validated by experts in Educational Management and Measurement and Evaluation, and their recommendations were used to refine the instrument. Reliability was established through a pilot study conducted in Ikom Education Zone. Cronbach Alpha coefficients index of 0.83 was obtained indicating satisfactory reliability.

Questionnaires were administered personally by the researcher with the assistance of eight trained research assistants, following ethical procedures including obtaining permission, informed consent, anonymity, and confidentiality. All the administered questionnaire items were retrieved. Responses were coded and scored using standardized rating scales of 1 to 4 for positively worded items, with reverse scoring applied where necessary. Data analysis was conducted with the help of SPSS version 27, and hypotheses were tested using Pearson Product Moment Correlation at 0.05 level of significance. Decisions were based on p-values, with null hypotheses rejected when $p \leq 0.05$. result is presented in tables.



Results and discussion
Hypothesis one

Hypothesis one: School facilities management do not significantly relate to public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria.

The two variables in this hypothesis are facility management and public secondary school effectiveness. Both facility management and public secondary school effectiveness were measured continuously in the study. To test this hypothesis, Pearson Product Moment Correlation analysis was used to analyse the data. The result of the analysis was presented in Table 1. Table 1 shows a positive correlation coefficients between school facilities management and public secondary school effectiveness. The result shows that the correlation coefficient was .69 ($p < .05$) for public secondary school effectiveness. Based on this result, hypothesis one was rejected. This implies that facility management significantly relates positively to public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria.

Table 1: Summary of correlations between school facility management and public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria (N=95)

Variables	\bar{X}	S.D	r	Sig.
School Facilities management	18.77	4.29		
Public secondary school effectiveness	20.03	3.02	.69*	.000

*Significant at $p < .05$ $df=93$

Hypothesis two: Staff development programmes do not significantly relate to public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria.

The two variables in this hypothesis are staff development programmes and public secondary school effectiveness. Both staff development programmes and public secondary school effectiveness were measured continuously in the study. To test this hypothesis, Pearson Product Moment Correlation analysis was used to analyse the data. The result of the analysis was presented in Table 2. Table 2 shows a correlation between staff development programmes and public secondary school effectiveness. The result shows that the correlation coefficient was .72 ($p < .05$) for public secondary school effectiveness. Based on this result, hypothesis two was rejected. This implies that staff development programmes significantly relate positively to public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria.



Table 2: Summary of correlations between school staff development programmes and public secondary school effectiveness in Calabar Education Zone, Cross River State, Nigeria (N=95)

Variables	\bar{X}	S.D	r	Sig.
Staff development programmes	19.22	3.06		
Public secondary school effectiveness	20.03	3.02	.72*	.000

*Significant at $p < .05$ $df=93$

Discussion of findings

The finding of the first hypothesis revealed that school facilities management significantly relates to public secondary school effectiveness. The finding shows how important a well-maintained and properly used school environment is for meaningful teaching and learning. When facilities such as classrooms, laboratories, and instructional materials are available and well managed, they create a comfortable and supportive atmosphere where teachers can teach effectively and students can stay engaged and perform better academically. On the other hand, when these facilities are poorly managed or inadequate, it often leads to disruptions in lessons, lowers teachers' motivation, and makes it harder for students to concentrate. The implication of this is that the effectiveness of public secondary schools depends greatly on how well their physical resources are handled, meaning that any effort to improve schools must give serious attention to proper facilities management if lasting educational progress is to be achieved.

This finding aligns with the study by Sanusi (2018), which reported a strong positive relationship between the availability of instructional materials and students' academic performance. The author noted that when instructional resources are adequately provided, teaching becomes more effective and learning outcomes improve, thereby emphasizing the need for both government and school administrators to prioritize the provision of such facilities. In a similar vein, Dominic, David, Redempta, and Joash (2017) observed that conducive classroom environments significantly influence students' academic performance, explaining that spacious, well-ventilated, and properly equipped classrooms enhance students' concentration and engagement. Likewise, Olanrewaju (2016) found that the availability of adequate and comfortable classroom furniture is significantly associated with improved student performance. Consistent with these findings, Ntahomvukiye and Cyprien (2024) established that access to physical, electronic, and instructional facilities has a significant relationship with students' academic achievement, particularly in science-related subjects. Furthermore, Abbas, Zaidatol, Ramli, and Siti (2017) demonstrated that effective school management practices contribute significantly to students' academic success. The implication of these studies is that effective and strategic management of school facilities plays a vital role in sustaining improved academic performance and strengthening overall school effectiveness.

The finding of the second hypothesis revealed that Staff development programmes significantly relate to public secondary school effectiveness. The finding highlights how important it is for



teachers and school personnel to continuously improve their skills and knowledge. This result likely occurred because when teachers are exposed to training, workshops, seminars, and other professional development opportunities, they become more confident, adopt better teaching methods, and are better equipped to meet students' learning needs. As a result, classroom delivery improves, students become more engaged, and overall school performance is enhanced. In contrast, a lack of such opportunities can leave teachers relying on outdated practices, which may limit students' academic progress. The implication of this finding is that the effectiveness of public secondary schools is closely linked to the capacity and competence of their staff, showing that continuous professional development is a key factor in achieving sustained improvement in school performance.

This finding is supported by the studies of Ekpoh et al. (2013) who found that teachers who participated in professional development programmes were more productive than those who did not, indicating that continuous training enhances teachers' capacity to deliver effectively in the classroom. Similarly, Asuquo et al. (2023), in a study of public secondary schools in Cross River State, revealed that well-structured training and development programmes significantly improve staff performance and contribute to the sustainability of educational institutions. In the same vein, Madukwe et al. (2024) reported that in-service training, seminar attendance, and participation in conferences had a significant positive influence on sustainable school administration in the Calabar Education Zone. These studies clearly relate to the present finding, as they demonstrate that when teachers and school personnel are adequately trained and continuously developed, their effectiveness improves, which in turn enhances school performance.

Conclusion

The study examined the relationship between institutional improvement strategies and the effectiveness of public secondary schools in the Calabar Education Zone of Cross River State, Nigeria. The findings revealed that both school facilities management and staff development programmes have significant positive relationships with school effectiveness. Based on these findings, the study concludes that institutional improvement strategies play a vital role in enhancing the effectiveness of public secondary schools.

Recommendations

Premised on the findings, it is recommended that:

1. School administrators should prioritize effective management of school facilities by ensuring regular maintenance, proper utilization, and adequate provision of physical and instructional resources to create a conducive learning environment.
2. Government should support school administrators to strengthen staff development programmes by organizing regular training, workshops, and seminars to enhance teachers' professional and instructional competence.
3. School management should adopt a more consistent approach to implementing institutional improvement strategies to ensure that available resources and development initiatives translate into improved school effectiveness.



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