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RESEARCH ARTICLE

Leveraging ICT On Policy Formulation and Transformative Administration in Cross River State Public Secondary Schools for Sustainable Educational Improvement

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Author's Contributions

All authors contributed equally to this research.

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ABSTRACT

This study examined Leveraging ICT on policy formulation and transformative administration in Cross River State public secondary schools for sustainable educational improvement. A Correlational design was adopted for this study with a population of 4,473 teachers in all 290 public secondary schools in the State. Stratified random sampling technique was adopted in selecting 628 public secondary schools teachers from the state's three Education Zones. Leveraging ICT on Policy Formulation and Transformative Administration for Sustainable Educational improvement (LIPFTASEIQ) Questionnaire was used for data collection. Collected data was subjected to descriptive statistical analysis. Findings revealed that ICT Infrastructure and Accessibility relates significantly with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency, and Institutional Capacity and Sustainability plus overall Sustainable Educational Improvement) in public secondary schools in Cross River State, whereas the relationship between Digital Policy Formulation Processes, and Administrative Efficiency and Transparency, Policy Implementation Effectiveness, Institutional Capacity and Sustainability and overall Sustainable Educational Improvement were all statistically significant. Based on these results, it was concluded that ICT Infrastructure and Accessibility should be engaged for Sustainable Educational Improvement in Cross River State. It was recommended that Cross River State Secondary Education Board should develop a real-time, ICT-driven policy tracking dashboard while the State education authorities mandate the adoption of integrated school management software just as Government and education policymakers should design fund recurring and structured ICT training programmes for the school staff.

Keywords: ICT infrastructure; institutional capacity; policy implementation; transformative administration

INTRODUCTION

The rapid advancement of Information and Communication Technology (ICT) has fundamentally reshaped the landscape of governance, policy development, and institutional administration across sectors globally, with education emerging as one of the

most profoundly affected domains (Voogt et al., 2018). In the context of developing nations, where educational systems face compounding challenges of resource scarcity, infrastructural deficits, and governance inefficiencies, ICT presents a compelling opportunity to catalyze systemic reform and administrative

transformation (Trucano, 2019; Unwin, 2020). Nigeria, as Africa's most populous nation, has recognized this imperative through successive national education policy frameworks, including the National Policy on Education (Federal Republic of Nigeria, 2023) and the National Digital Economy Policy and Strategy (NDEPS, 2020–2030), both of which underscore the centrality of digital tools in advancing quality education and effective school governance.

Cross River State presents a particularly instructive case for examining the interface between ICT and educational administration. The state's public secondary schools serve a large and diverse student population, yet with systemic challenges of : outdated administrative processes, limited access to digital infrastructure, policy implementation gaps, and inadequate data management systems . These have continued to constrain educational quality and institutional performance (Agbor & Ekanem, 2021; Okon & Bassey, 2022). With several policy interventions at both federal and state levels, the transformation of school administration through ICT has still remained largely aspirational rather than operational, due to the implementation hampered by inadequate teacher training, poor electricity supply and limited broadband connectivity (Etim & Ushie, 2020).

Globally, researches consistently demonstrate that ICT-enabled governance improves transparency, accelerates policy formulation, enhances stakeholder communication, and strengthens accountability mechanisms in educational systems (Dede, 2018; Kozma, 2019; Twining et al., 2021). In Sub-Saharan Africa, however, the translation of these benefits into sustained institutional change remains uneven, often contingent on leadership capacity, funding structures, and the alignment between technology adoption and existing policy frameworks (Adusei-Asante & Hancock, 2022; Oyelaran-Johnson, 2020). It is within this context that the present study situates itself — not merely as a diagnostic inquiry into ICT gaps, but as a framework-building effort aimed at charting a sustainable path for ICT-driven educational reform in Cross River State.

The idea of transformative administration here is from the transformational leadership theory and new public management discourse, over a deliberate, technology-mediated shift in how school administrators come up with decisions, engage stakeholders, manage data, and implement policies in responsive, transparent, and outcomes-oriented ways (Bush, 2020; Leithwood & Sun, 2018). If transformative administration is anchored

to robust ICT systems, it moves institutions from reactive, paper-based governance to proactive, evidence-driven management. This is quite necessary and urgent for Cross River State's secondary education sector.

This work is based on the Leveraging ICT on Policy Formulation and Transformative Administration in Cross River State Public Secondary Schools with emphasis on ICT Infrastructure and Accessibility with Digital Policy Formulation Processes in relation to Sustainable Educational Improvement in terms of: Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability for sustainable educational improvement. The information and communication technologies (ICT) utilization in the policy formulation and administrative processes is one of the most significant transformations in modern educational management. It is the deliberate and strategic deployment of digital tools, communication technologies, platforms, and data systems to enhance the quality, inclusivity, efficiency, and responsiveness of policy decisions and administrative operations in educational institutions (Fullan, 2020; Khalil & Elkhider, 2021). Public secondary schools here need more than mere digitization of existing paper-based processes; but the involvement of a fundamental reconceptualization of the way school administrators gather information, consult stakeholders, formulate policy, as well as implement decisions, alongside monitoring of outcomes in real time (Abubakar & Adamu, 2023; Nwosu & Etuk, 2024).

The theoretical justification for ICT leveraging in educational policy and administration is drawn from multiple scholarly traditions. For instance, the Rogers' (2003) Diffusion of Innovations Theory presents how digital tools spread across educational systems plus how its early adoption can catalyze system-wide transformation. In Fullan's (2020) framework of change leadership also, sustainable educational improvement requires leaders who can harness technology not as an end in itself but as a vehicle for deepening institutional capacity, professional collaboration, and data-informed decision-making. In the Nigeria, where public secondary school administration have bureaucratic inefficiency, information asymmetry, and limited stakeholder participation, ICT leveraging offers a pathway for more transparent, accountable, and participatory governance (Nnaji & Unamba, 2024; Unamba et al., 2026).

The relevance of this discourse is particularly urgent in Cross River State Public secondary schools where there is simultaneous constraint by infrastructural deficits alongside growing governmental commitment to digital transformation in education (Obasi & Mbah, 2023; Udoh & Bassey, 2021). With the state's three educational zones (Calabar, Ikom, and Ogoja) there are varying levels of digital readiness, indicating that ICT leveraging for policy and administration must be sensitive to contextual disparities towards yielding sustainable educational improvement. Different scholars have argued that when ICT is strategically embedded in the policy formulation process, there is bound to be the enhancement in the quality of decisions unto being more evidence-based, inclusive of diverse stakeholder voices, and responsive to ground-level realities in schools (Leithwood et al., 2020; Owan et al., 2023).

The administrative benefits of ICT leveraging as well extend to virtually every domain of secondary school governance, from personnel management, to financial administration, student records management, curriculum planning, and to inter-agency communication with state ministries of education (Emunemu & Imobekhai, 2022; Ezeani & Igwesi, 2022). With these school administrators are better positioned to generate reliable institutional data, identify performance gaps, equitable allocation of resources, and swift response to policy directives from supervising authorities which result in a more dynamic, accountable, and improvement-oriented school system (Ilori & Adegbola, 2023; Adesanya & Okonkwo, 2022). This calls for ICT infrastructure and accessibility.

ICT infrastructure and accessibility hereby entail the foundational precondition for any meaningful leveraging of technology in policy formulation and educational administration. Whereas infrastructure is the physical and technical assets that enable digital engagement, like the computers, tablets, smart phones, servers, local area networks, broadband internet connectivity, electricity supply, and the software systems that run on these platforms (Khalil & Elkhider, 2021; Owan et al., 2023). Its accessibility is on the extent to which these infrastructural assets are equitably available to all relevant stakeholders' geographic location, socioeconomic status, or institutional capacity notwithstanding (Adeyemi & Uko, 2022; Udoh & Bassey, 2021).

The quality of ICT infrastructure may determine the extent to which digital tools can be meaningfully

deployed in school administration and policy processes. According to Eze and Akpan (2021), institutions with robust ICT infrastructure are significantly more likely to adopt data-driven administrative practices, implement digital communication systems, and engage in evidence-based policy formulation than those operating with inadequate or intermittent digital resources. Similarly, Obasi and Mbah (2023) opine that in states like Cross River, geographic disadvantage compounds infrastructural deficits, whereas schools in rural and semi-urban areas of the Ikom and Ogoja educational zones experience far more limited connectivity and device availability than their counterparts in the Calabar zone.

Electricity supply also deserves special attention in the Nigerian context where reliable power is a critical infrastructural prerequisite for ICT deployment, but the public secondary schools across Cross River State, just like in other parts of Nigeria, experience erratic electricity supply (Emunemu & Imobekhai, 2022; Nwosu & Etuk, 2024). This indeed undermines the operationalization of digital tools. To this, scholars have proposed the integration of alternative energy solutions like solar power for ICT infrastructure planning for public schools in Nigeria, to ensure that digital administrative systems remain functional irrespective of grid instability (Owan et al., 2023; Ilori & Adegbola, 2023).

The Cross River State government provides a policy foundation upon which school-level ICT leveraging can be built. This requires coordinated action across the Ministry of Education, the State Universal Basic Education Board, and school-level leadership, with sustained budgetary allocation to ICT infrastructure development (Nnaji & Unamba, 2024; Unamba & Njoku, 2026). To achieve this, there should be digital Policy Formulation Processes which is the process by which educational policies are conceived, developed, deliberated upon, and finalized through the use of ICT-enabled tools and platforms, for a more data-driven, participatory, transparent, and responsive policy process unto the realities of the school system (Fullan, 2020; Leithwood et al., 2020). This is in contrast to the traditional policy formulation, known for linear, top-down processes with limited stakeholder consultation, paper-based documentation, and slow information flow. The theoretical grounding for this is in the educational management literature that argues that in complex educational systems, effective policy must be grounded in accurate, timely, and contextually sensitive data (Fullan (2020). With this, school administrators can

submit performance data electronically, and education ministry officials can analyze trends across schools in real time, while policy drafts can be circulated digitally to reflect the actual conditions of schools and the genuine needs of educational communities (Nwosu & Etuk, 2024; Ilori & Adegbola, 2023).

In the Nigerian secondary school context, this has gained increasing scholarly attention as a mechanism for addressing the longstanding disconnect between centrally formulated policies and school-level realities. As opined by Emunemu and Imobekhai (2022), schools whose administrators actively used digital communication tools to interact with state education authorities have a stronger sense of policy ownership with higher rate of successful policy implementation than those operating through purely analogue channels. This finding underscores the participatory potential of digital policy processes, in which school-level actors become active contributors to policy rather than passive recipients of directives from above.

One critical dimension is the use of data analytics in identifying educational problems and designing targeted policy response to records of student enrolment, attendance, academic performance, teacher deployment, and resource utilization, that become powerful inputs to the policy formulation process (Abubakar & Adamu, 2023; Unamba et al., 2026).

Digital policy formulation is however, not without its challenges in the Nigerian context, which call for a phased, context-sensitive approach that builds capacity progressively, invests in infrastructure equitably, and maintains hybrid consultation mechanisms that do not leave analogue stakeholders behind (Nnaji & Unamba, 2024; Ezeani & Igwesi, 2022). For Cross River State public secondary schools, the journey toward fully digital policy formulation is both necessary and achievable, with deliberate investment in ICT infrastructure, targeted capacity building for school administrators and ministry officials, and a policy framework that mandates digital data collection and participatory consultation, for building a school governance system whereby policy is continuously informed by evidence, shaped by stakeholder voices, and implemented with the transparency and accountability that sustainable educational improvement demands (Fullan, 2020; Leithwood et al., 2020; Unamba & Njoku, 2026).

When it comes to Sustainable educational improvement, it is the enduring, systemic, and measurable enhancement of educational outcomes,

institutional processes, and governance quality in public secondary schools, driven by deliberate policy action and administrative reform (Fullan, 2020; Leithwood et al., 2020). Its difference is in its emphasis on durability, equity, and institutional embeddedness not contingent on the presence of a particular leader or the availability of a temporary resource injection, but anchored on transformed institutional cultures, which are strengthened administrative systems, with consistently implemented policies (Unamba et al., 2026). In Cross River State public secondary schools therefore, sustainable educational improvement is in this work is viewed through policy implementation effectiveness, administrative efficiency and transparency, plus institutional capacity and sustainability.

Policy Implementation Effectiveness here is the degree to which formulated educational policies are translated into concrete, measurable actions at the school level, with expected results within the stipulated timeframe and in alignment with the original policy objectives (Leithwood et al., 2020; Emunemu & Imobekhai, 2022). It is widely recognized as one of the most problematic dimensions of educational governance, especially in developing countries where the gap between policy design and its practice is often vast and persistent (Ogbogu, 2019; Obasi & Mbah, 2023).

This implementation gap has been documented across multiple policy domains, including teacher professional development, curriculum reform, school infrastructure provision, and examination integrity. In Nigeria, and in Cross River State specifically, with scholars always identifying weak administrative systems, inadequate monitoring mechanisms, and poor stakeholder implementation failure (Nnaji & Unamba, 2024; Nwosu & Etuk, 2024). The relationship between ICT leveraging and policy implementation effectiveness here is well established in modern educational management scholarship.

In Cross River State, where there has been fragile trust on the community trust in government institutions, building this sense of policy ownership through inclusive digital consultation mechanisms can significantly improve the prospects of sustained implementation across diverse school communities (Udoh & Bassey, 2021; Eze & Akpan, 2021). Policy implementation effectiveness also is not solely a function of administrative technology; but requires competent, committed, and adequately supported school leadership. Leithwood et al. (2020) emphasizing the most technologically sophisticated monitoring

system unable to substitute strong instructional leadership at the school level. This means that in Cross River State context, investments in ICT infrastructure for policy monitoring must be accompanied by sustained leadership development programmes for the capacity of school heads and administrative officers in using digital tools purposefully and effectively (Nnaji & Unamba, 2024; Fullan, 2020).

In administrative Efficiency and Transparency, it is the capacity of school management systems to accomplish administrative task with minimal waste of time, resources, and human effort, while maximizing the quality and accuracy of institutional outputs (Ezeani & Igwesi, 2022; Abubakar & Adamu, 2023). Transparency is the openness, accessibility, and accountability of administrative processes and decisions to relevant stakeholders (Ogbogu, 2019; Leithwood et al., 2020). Administrative efficiency and transparency therefore form a critical pillar of sustainable educational improvement, whereas schools well administered and openly accountable are better positioned to attract and retain quality staff, build community confidence, utilize resources optimally, and consistently implement policies over time (Fullan, 2020; Unamba & Njoku, 2026).

In Cross River State public secondary schools, the efficiency gains from digital administration are significant in the scale and geographic spread of the school system like in Ikom and Ogoja educational zones with significant delays in receiving and processing administrative directives from the state ministry of education, due to the physical distance and manual document transmission (Obasi & Mbah, 2023; Udoh & Bassey, 2021). Transparency is equally enhanced through ICT leveraging in school administration. When financial transactions are processed through digital payment platforms, when procurement decisions are documented in auditable digital records, and when staff attendance and performance data are maintained in secure, accessible databases, the opportunities for corruption, favoritism, and administrative misconduct are substantially reduced (Adesanya & Okonkwo, 2022; Eze & Akpan, 2021).

The significance of this study lies in its dual contribution: theoretically, and practically for sustainable educational improvement with digital transformation to reshape public sector administration globally, with policy-aligned ICT frameworks in Nigerian secondary education (Sánchez-Prieto et al., 2019; World Bank, 2022).

Statement of the problem

The public secondary school system in Cross River State faces a profound governance crisis because of outdated administrative practices, incoherent policy frameworks, and the systemic underutilization of Information and Communication Technology (ICT) in the formulation of policy and in school administration (Agbor & Ekanem, 2021; Okon & Bassey, 2022). The acknowledged transformative potential of ICT in educational governance notwithstanding, the majority of public secondary schools in Cross River State still operate within analog, paper-dependent administrative paradigms which cannot meet the demands of 21st-century educational management.

The policy formulation and the implementation in Cross River State remain largely are opaque, and disconnected from real-time school-level data, thereby limiting the responsiveness and effectiveness of governance decisions (Etim & Ushie, 2020; Heeks, 2018) whereas school administrators are rarely equipped with digital tools or training to participate meaningfully in evidence-based policy processes, which creates structural disconnect between policy intent and institutional practice (Blau & Shamir-Inbal, 2017; Oyelaran-Johnson, 2020). There is compounded absence of functional Management Information Systems (MIS), with inadequate ICT infrastructure in schools, irregular electricity supply, and lack of technical support in the public secondary schools (Eze et al., 2020; Soomro et al., 2019).

Although there have been studies on the ICT adoption in Nigerian education broadly (Eze et al., 2020; Nkosi & Ndlovu, 2021), only few have focused on its strategic application to school governance and educational policy at the sub-national level, thereby leaving policymakers without the contextual evidence base needed for the design of effective, sustainable interventions (Adusei-Asante & Hancock, 2022; Tondeur et al., 2018). These have created tangible and measurable gaps as Cross River State's secondary education system continues to experience suboptimal student outcomes, with high administrative inefficiencies, poor stakeholder engagement, and weak policy compliance (Federal Ministry of Education, 2022; World Bank, (2022).

These challenges will likely persist and deepen then further widen the educational quality gap between Cross River State and better-performing states in Nigeria. to that, this study seeks to examine how strategically leveraged ICT can transform policy formulation and administrative practices in Cross River

State public secondary schools, with a context-sensitive framework for sustainable institutional improvement.

Objectives of the Study

The objective of the study was to investigate:

1. How ICT Infrastructure and Accessibility relate with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability) in Public Secondary Schools, Cross River State.
2. How Digital Policy Formulation Processes relates with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability) in Public Secondary Schools, Cross River State.

Research Questions

These research questions were raised to guide the study:

1. How does ICT Infrastructure and Accessibility relate with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability) in Public Secondary Schools, Cross River State?
2. How does Digital Policy Formulation Processes relate with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability) in Public Secondary Schools, Cross River State?

METHODOLOGY

The design adopted for this study was Correlational design to cover the three Education Zones: of Cross River State: Calabar, Ikom and Ogoja with the population of 4,473 teachers from the public secondary schools in Cross River State. With Stratified random sampling technique 20 percent of the public secondary school teachers was selected in each stratum as sample for the study comprising two thousand, five hundred and two (2,502) respondents: six hundred and twenty-eight (628) teachers and one thousand, eight hundred and seventy-nine (1,879) students from the forty-one (41) public secondary schools (14%) from the state's three education zones.

The instrument: Leveraging ICT on Policy Formulation

and Transformative Administration for Sustainable Educational improvement (LIPFTASEIQ) Questionnaire was used for data collection.

The questionnaire had section A, B and C. Section A of the instrument was designed to measure the demographic variables of the respondents: gender, educational qualifications. Section B was designed to measure the Leveraging ICT on Policy Formulation (ICT Infrastructure and Accessibility and Digital Policy Formulation Processes). Section C of the questionnaire measured the Sustainable Educational Improvement variables: Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability). The items had four options ranging from: Strongly Agree (SA), Agree (A), Disagree (DA), and Strongly Disagree (SD).

The items in the questionnaires were constructed using ideas from literature related to the variables measured. The respondents were required to respond objectively based on their degree of agreement or disagreement on the attributes and phenomena measured. Reliability of the instruments was trial tested on 50 respondents from randomly selected public secondary schools in Akwa Ibom State.

Table 1. Cronbach alpha reliability coefficients for all sub-scales in the study instrument (N=50)

Sub-scales	No. of items	X	SD	A
ICT Infrastructure and Accessibility	6	15.23	2.86	.88
Digital Policy Formulation Processes	6	13.61	2.83	.92
Policy Implementation Effectiveness	6	12.55	2.26	.76
Administrative Efficiency and Transparency	6	13.95	2.40	.94
Institutional Capacity and Sustainability	6	12.53	2.60	.86

The consistency of the instruments was indicated here at what they were expected to measure and thus suitable for the study as presented in table 2.

Table 2 presented the means and standard deviations

of the research variables. The least leveraged ICT on policy formulation is ICT Infrastructure and Accessibility. On the other hand, the highest obtained mean values for the sub-variables of the dependent variable was $\bar{X}=17.42$ for Policy Implementation Effectiveness, followed by Institutional Capacity and Sustainability ($X = 16.88$), and Administrative Efficiency and

Transparency ($X = 16.60$). However, the overall Sustainable Educational Improvement indicated a mean value $\bar{X} = 50.84$. The standard deviations obtained for all the sub-variables were moderate, with equal spread on the pattern of the responses of teachers sampled for this study.

Table 2. Summary of descriptive statistics of the research variables N=628

S/N	Variables	$\bar{x}$	SD
1	ICT Infrastructure and Accessibility X1	12.88	3.68
2	Digital Policy Formulation Processes X2	14.77	2.56
3	Policy Implementation Effectiveness Y1		
4	Administrative Efficiency and Transparency Y2	16.60	3.07
5	Institutional Capacity and Sustainability Y3	17.42	2.81
6	Overall Sustainable Educational Improvement (Y1-3)	16.88	2.95

Research question 1

To what extent does ICT Infrastructure and Accessibility relate to Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and

Institutional Capacity and Sustainability)?

To answer this question, the Pearson Product Moment Correlation analysis was employed and the results are as shown in Table 3.

Table 3. Summary of the analysis of the relationship between ICT infrastructure and accessibility and the sub-variables of sustainable educational improvement

Variables	$\bar{x}$	SD	r
ICT Infrastructure and Accessibility (X1)	12.88	3.68	
Administrative Efficiency and Transparency (U1)	16.60	3.07	-.046
Policy Implementation Effectiveness (U2)	17.42	2.81	.067
Institutional Capacity and Sustainability (U3)	16.88	2.95	.120
Overall Sustainable Educational Improvement (U1 – U3)	50.84	5.89	.120

Table 3 showed very weak and positive relationship between ICT Infrastructure and Accessibility and Policy Implementation Effectiveness ($r = .067$), weak and positive relationship between ICT Infrastructure and Accessibility and Institutional Capacity and Sustainability ($r = .227$) and Sustainable Educational Improvement ($r = .120$). On the other hand, the relationship between ICT Infrastructure and Accessibility and Administrative Efficiency and Transparency showed a very weak and negative correlation ($r = -.046$).

Research question 2

How do Digital Policy Formulation Processes relate with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability) in Public Secondary Schools, Cross River State?

To analyze this research question, the Pearson Product Moment Correlation analysis was employed, and the results are as shown in Table 4.

Table 4 showed that relationship between Digital Policy Formulation Processes and all the sub variables of Sustainable Educational Improvement were positive.

However, it was weak for Administrative Efficiency and Transparency ($r = .252$) and Policy Implementation Effectiveness ($r = .184$); whereas for Institutional Capacity and Sustainability and overall Sustainable Educational Improvement, the relationship was

moderate ($r = .338$ & $r .384$) respectively. In other words, as Digital Policy Formulation Processes increases, all sub-variables of the Sustainable Educational Improvement increased too.

Table 4. Summary of the analysis of the relationship between digital policy formulation processes and the sub-variables of sustainable educational improvement

Variables	$\bar{x}$	SD	r
Digital Policy Formulation Processes (X2)	15.07	2.92	
Administrative Efficiency and Transparency (Y1)	16.60	3.07	.252
Policy Implementation Effectiveness (Y2)	17.42	2.81	.084
Institutional Capacity and Sustainability (Y3)	16.88	2.95	.338
Overall Sustainable Educational Improvement (U1 – Y3)	50.84	5.89	.384

DISCUSSION OF FINDINGS

The findings of this study revealed that ICT Infrastructure and Accessibility relate significantly with Sustainable Educational Improvement (in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability plus overall Sustainable Educational Improvement) in public secondary schools in Cross River State. Possible reasons for this finding could be due to the fact that when it comes to Sustainable Educational Improvement, ICT Infrastructure and Accessibility has lots to input and not just on Institutional Capacity and Sustainability and overall Sustainable Educational Improvement but also on Administrative Efficiency and Transparency and Policy Implementation Effectiveness.

The next finding revealed that the relationship between Digital Policy Formulation Processes and Administrative Efficiency and Transparency, Policy Implementation Effectiveness, Institutional Capacity and Sustainability and overall Sustainable Educational Improvement were all statistically significant at .05 level with 626 degrees of freedom thereby rejecting the null hypothesis for all the sub-variables of the dependent variable in terms of Policy Implementation Effectiveness, Administrative Efficiency and Transparency and Institutional Capacity and Sustainability plus overall Sustainable Educational Improvement) in public secondary schools in Cross River State.

CONCLUSION

Based on the results of the study, it was concluded that ICT Infrastructure and Accessibility was significant in Institutional Capacity and Sustainability plus overall Sustainable Educational Improvement while insignificant with Administrative Efficiency and Transparency and Policy Implementation Effectiveness. Digital Policy Formulation Processes and all the sub variables of Sustainable Educational Improvement were positive.

RECOMMENDATIONS

Based on the results of the findings, the following recommendations are made:

1. Cross River State Secondary Education Board should develop a real-time, ICT-driven policy tracking dashboard that allows administrators, principals, and education officers to monitor the implementation status of educational policies across schools.
2. State education authorities should mandate the adoption of integrated school management software that covers student records, staff administration, budgeting, and procurement in all public secondary schools in Cross River State with audit trail features and stakeholder-accessible reporting portals to enhance accountability.
3. Government and education policymakers

should design and fund recurring, structured ICT training programmes for school principals, vice-principals, and subject teachers, so that skills are not confined to a few individuals but are embedded institutionally.

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