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Commencement of Computer-Based Technology Examinations in Secondary Schools in Nigeria: Issues, Challenges, and Prospects

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Abstract

The digital revolution has rapidly transformed how educational assessment and certification are conducted across the world. Nigeria's intention to commence Computer-Based Testing (CBT) for all secondary school examinations—especially the West African Senior School Certificate Examination (WASSCE) administered by the West African Examinations Council (WAEC) and the Senior School Certificate Examination (SSCE) conducted by the National Examinations Council (NECO)—marks a significant reform in the nation's education system. The transition from traditional paper-and-pencil examinations to computer-based assessment is intended to promote transparency, reduce examination malpractice, enhance accuracy, and strengthen efficiency in grading and results management. However, despite the promising benefits of this innovation, the haphazard and premature implementation of CBT examinations in a developing country such as Nigeria presents enormous structural, logistical, and socio-economic challenges. These include inadequate infrastructure, unreliable power supply, poor internet connectivity, limited digital literacy among teachers and students, and glaring inequalities between urban and rural schools. Using descriptive and analytical methods, this study examines the issues, challenges, and prospects associated with the commencement of CBT examinations in Nigerian secondary schools. Data were drawn from official policy

documents, prior scholarly works, and comparative global case studies. The findings reveal that while CBT holds transformative potential for improving educational standards, a successful implementation requires gradual phasing, proper infrastructural investment, policy coherence, and comprehensive stakeholder engagement. The study concludes with strategic recommendations aimed at ensuring that Nigeria's digital examination policy achieves its intended objectives sustainably and inclusively.

Keywords: Computer-Based Testing (CBT), Examination Reform, WAEC, NECO, ICT Infrastructure, Educational Policy, Nigeria.

Introduction

Education remains the bedrock of national development and a key determinant of socioeconomic transformation. In the 21st century, technological innovation has reshaped not only instructional methods but also evaluation systems. Around the world, traditional examination systems are being replaced by computer-based assessment models to improve efficiency, accuracy, and accountability. In Nigeria, the proposal by the West African Examinations Council (WAEC) and the National Examinations Council (NECO) to commence computer-based testing for all senior secondary school examinations by 2026 represents a bold step toward aligning with international best practices.

The introduction of CBT into Nigeria's secondary education system is a welcome development. It promises to curb the rampant cases of examination malpractice, ensure prompt release of results, enhance the objectivity of marking, and promote standardization in educational assessment. The initiative also aligns with the Federal Government's National Digital Economy Policy and Strategy (2020–2030) which advocates the integration of digital tools in all sectors, including education.

Nevertheless, the proposed policy comes with complex administrative, infrastructural, and socioeconomic challenges. The Nigerian educational system still grapples with limited access to ICT facilities, poor funding, epileptic electricity supply, and unequal opportunities between urban and rural schools. According to data from the National Bureau of Statistics (2023), less than 40% of secondary schools in Nigeria have functional computer laboratories, and fewer than 25% have stable internet connectivity. This structural imbalance raises critical concerns about the feasibility of implementing CBT examinations nationwide within a short time frame.

Furthermore, while the Joint Admissions and Matriculation Board (JAMB) successfully adopted CBT for tertiary entrance examinations in 2015, the operational realities of secondary schools are markedly different. Many rural schools lack basic computer literacy programs, and the cost of purchasing and maintaining ICT equipment is beyond their budgetary capacity.

This study, therefore, examines three central questions:

1. What are the potential benefits of introducing computer-based testing in Nigerian secondary schools?
2. What challenges could arise from the haphazard implementation of this policy?
3. What strategic measures are required to ensure that the introduction of CBT examinations achieves its desired outcomes?

Objectives of the Study

The main objective of this study is to examine the issues, challenges, and prospects associated with the commencement of computer-based technology examinations in Nigeria's secondary schools. The specific objectives are to:

1. Assess the potential benefits of adopting CBT examinations in secondary schools.
2. Identify the major challenges and obstacles to effective implementation.
3. Evaluate institutional readiness at WAEC and NECO for full-scale CBT deployment.
4. Recommend policy strategies for the effective and sustainable implementation of CBT examinations.

Significance of the Study

This study is significant for several reasons. First, it provides a scholarly insight into the implications of digital transformation within Nigeria's educational evaluation system. Second, it offers a policy guide for government agencies and examination bodies such as WAEC, NECO, and the Federal Ministry of Education. Third, it contributes to the growing literature on ICTdriven education reform in Africa. Lastly, it presents a pragmatic framework for bridging infrastructural gaps and ensuring inclusive participation in digital examinations across the federation.

Conceptual Review

The introduction of Computer-Based Testing (CBT) into national education systems has become a global trend in the 21st century. CBT refers to the process of administering tests using computer technology, where questions are presented digitally and responses are recorded electronically. It differs from the traditional Paper-Based Testing (PBT) system, which relies on printed examination materials and manual marking.

According to Bennett (2015), CBT enhances testing efficiency, increases objectivity, and minimizes human error during marking. It also enables the integration of multimedia resources, adaptive testing, and immediate feedback for students. In the Nigerian context, CBT was first implemented on a national scale by the Joint Admissions and Matriculation Board (JAMB) in 2015 for the Unified Tertiary Matriculation Examination (UTME). The success of this initiative prompted other examination bodies, notably WAEC and NECO, to consider replicating the model in secondary schools.

Scholars such as Adewale (2019) and Okoro (2020) note that the CBT approach provides several benefits, including time-saving, enhanced security of test materials, and reduction in

examination malpractice. However, as Olayemi (2021) observes, these advantages are only realizable when adequate infrastructure, digital literacy, and institutional preparedness are in place.

CBT aligns with Nigeria's broader National Digital Economy Policy and Strategy (2020–2030), which calls for digitalization in governance, education, and service delivery. Yet, translating this policy into reality within the secondary education system remains challenging. A 2022 survey by the Federal Ministry of Education showed that while 85% of urban schools in Nigeria had access to at least one computer lab, fewer than 30% of rural schools had similar facilities, underscoring a deep digital divide.

The essence of computer-based examination reform is therefore twofold: technological modernization and educational accountability. However, in a context characterized by inadequate infrastructure, poor funding, and social inequality, such reform must be approached with strategic caution to prevent new forms of exclusion.

Empirical Review

Empirical studies around the world have shown diverse outcomes of computer-based examination systems, depending on context and capacity.

In developed countries, studies have demonstrated positive outcomes. Kim and Kellough (2017) in South Korea found that CBT improved students' test-taking experience and reduced examiner bias. Similarly, European Education Review (2019) reported that 90% of students in Norway preferred CBT for its convenience and faster feedback.

However, in developing nations, empirical evidence paints a mixed picture. Njuguna (2018) in Kenya observed that poor electricity supply and lack of training were major obstacles to CBT success. Mensah and Opoku (2020) reported that in Ghana, WAEC's pilot CBT examinations faced server crashes, data loss, and student anxiety due to unfamiliarity with digital tools.

In Nigeria, Olatunji (2018) conducted a comparative study between JAMB's CBT examinations and traditional paper-based tests. He found that while CBT drastically reduced examination malpractice, it also disadvantaged students from rural areas with limited computer exposure. Similarly, Adebayo and Hassan (2021) found that in 12 secondary schools sampled across Kaduna and Lagos States, only 38% of students felt confident using computers for formal assessments. Table 1 below illustrates findings from selected empirical studies on the use of CBT in Nigeria.

Table 1: Selected Empirical Findings on CBT Examinations in Nigeria

Author(s)	Year	Scope of Study	Key Findings	Source
Olatunji, A.	2018	JAMB CBT vs Paper-based Testing	CBT reduced exam malpractice but created rural– urban inequity.	Field Study, 2018
Adebayo Hassan & Okoro, J.	2021	ICT readiness in Lagos & Kaduna schools	Only 38% of students had digital competence to take CBT exams.	Educational Research Journal

Author(s)	Year	Scope of Study	Key Findings	Source
	2020	CBT Adoption in WAEC pilot centers	Technical failures and power outages disrupted smooth testing in 20% of centers.	Education Today, 2020
Mensah & Opoku (Ghana)	2020	WAEC pilot CBT study in Ghana	Infrastructure and training gaps hindered test reliability.	Ghana Education Review, 2020
Njuguna, M. (Kenya)	2018	Secondary School ICT Assessment	Lack of electricity and computer literacy impeded CBT adoption.	East African Review, 2018

Source: Compiled by Author from Field Literature (2024).

Gaps in the 8Literature

From the foregoing empirical studies, it is evident that most existing works have concentrated on tertiary-level CBT experiences, particularly those of JAMB. There is a limited body of empirical literature addressing the readiness and challenges of extending computer-based examinations to secondary schools, where infrastructure, maturity, and access differ significantly.

Furthermore, many Nigerian studies adopt technical or ICT-focused approaches, often neglecting the public administration and policy implementation dimensions—such as intergovernmental coordination, funding models, and administrative capacity of WAEC and NECO. There is also a noticeable absence of comparative analyses linking Nigeria's planned reforms with successful experiences in similar developing countries, such as Kenya, India, or South Africa.

This study fills these gaps by offering a comprehensive policy analysis of the proposed CBT introduction in Nigeria's secondary education sector. It evaluates both institutional preparedness and implementation risks, combining insights from education policy, ICT governance, and administrative theory.

Theoretical Framework

The theoretical foundation of this study is anchored in two complementary frameworks:

1. **Technology Acceptance Model (TAM) by Davis (1989) –** which explains how users come to accept and use new technology. TAM posits that perceived usefulness and perceived ease of use determine whether an innovation is successfully adopted. In the context of Nigerian secondary schools, teachers and students' perception of CBT's usefulness and simplicity will determine its long-term success.
2. **Innovation Diffusion Theory (IDT) by Everett Rogers (2003) –** which explains how innovations spread across social systems. The theory identifies five stages of adoption: knowledge, persuasion, decision, implementation, and confirmation. The Nigerian case reflects these stages: policymakers have introduced the idea (knowledge), but full implementation depends on persuasion (public buy-in), resource mobilization, and infrastructural readiness.

Together, these theories provide an explanatory lens for understanding why some schools may adopt CBT successfully while others resist or fail due to structural constraints. They also highlight that technological reform is not merely a technical process but a social and administrative transition requiring leadership, training, and sustained investment.

Research Design

This study adopted a descriptive survey design, which was considered appropriate because it enables the researcher to collect, analyze, and interpret data that describe the current situation regarding the introduction of computer-based technology (CBT) examinations in Nigeria's secondary school system. The design provided a systematic means of examining the issues, challenges, and prospects associated with the implementation of CBT, particularly in relation to the West African Examinations Council (WAEC) and the National Examinations Council (NECO).

The descriptive survey approach allowed for both quantitative and qualitative insights, as it involved the use of structured questionnaires and key informant interviews with educational administrators, teachers, students, and ICT officers across selected states in Nigeria.

Population of the Study

The target population consisted of secondary school teachers, principals, students, education board officials, ICT instructors, and examination officers from the Federal Ministry of Education, the West African Examinations Council (WAEC), and the National Examinations Council (NECO). According to the Federal Ministry of Education (2024), Nigeria has over 16,000 public and private secondary schools with a combined workforce of more than 320,000 teachers and approximately 8 million students.

Due to this vast number, the study focused on a manageable subset through representative sampling.

Sample Size and Sampling Technique

Using Yamane's (1967) statistical formula for finite populations, a sample size of 400 respondents was determined to be adequate for this study. The sample was drawn using a multistage sampling technique:

1. **Stage One:** Selection of six geopolitical zones to ensure representativeness.
2. **Stage Two:** Two states were randomly selected from each zone (12 states in total).
3. **Stage Three:** From each selected state, two public and two private secondary schools were chosen.
4. **Stage Four:** Respondents (teachers, students, principals, ICT officers) were selected through stratified random sampling to ensure fair representation.

Table 2: Distribution of Respondents:
The distribution of respondents is shown below:

Category	Frequency	Percentage (%)
Teachers	120	30.0
Students	150	37.5
Principals	60	15.0
ICT Officers	40	10.0
Examination Officials (WAEC/NECO)	30	7.5
Total	400	100

Source: Field Survey, 2024.

Sources of Data

Data were obtained from both primary and secondary sources.

Primary Data: Derived from questionnaires and interviews administered to the sampled respondents.

Secondary Data: Collected from official publications of WAEC, NECO, Federal Ministry of Education, National Bureau of Statistics (NBS), journal articles, textbooks, policy documents, and online reports relating to digital education and CBT examinations in Nigeria.

Research Instruments

The principal instrument used for data collection was a structured questionnaire titled "CBT Examination Implementation Assessment Questionnaire (CBTEIAQ)". The questionnaire was divided into four sections:

Section A: Demographic characteristics of respondents.

Section B: Benefits and prospects of introducing CBT examinations.

Section C: Challenges confronting effective implementation.

Section D: Possible solutions and policy recommendations.

Each item was measured using a 5-point Likert scale, ranging from Strongly Agree (5) to Strongly Disagree (1). Semi-structured interviews were also conducted with officials from WAEC and NECO to provide contextual insights.

Validity and Reliability of the Instrument

The validity of the research instrument was ensured through expert review by three senior lecturers from the Faculty of Education and Department of Public Administration, Taraba State University, Jalingo. Their feedback helped refine the questionnaire for clarity and relevance.

Reliability was established through a pilot test involving 40 respondents in two schools outside the sampled states. The Cronbach Alpha coefficient obtained was 0.87, indicating high internal consistency and reliability of the instrument.

Method of Data Collection

The researcher personally distributed the questionnaires with the assistance of research assistants in each of the selected states. Respondents were assured of confidentiality and anonymity to encourage honest responses. In addition, online Google Forms were used to complement physical data collection, particularly in urban areas where internet access was available.

Method of Data Analysis

Quantitative data were analyzed using descriptive statistics such as frequencies, means, and percentages. Inferential statistics such as Chi-square (χ^2) and Pearson Correlation were used to test relationships between variables like availability of ICT facilities and perceived readiness for CBT exams.

Qualitative data from interviews were transcribed and analyzed using thematic content analysis, which helped identify recurring themes, patterns, and perspectives.

Ethical Considerations

The study adhered to standard ethical protocols in educational research. Respondents participated voluntarily, and informed consent was obtained prior to data collection. No personal identifiers were used, and the data were analyzed in aggregate form to maintain confidentiality.

Limitations of the Study

While the study covered multiple states, it faced certain limitations such as uneven internet access, limited time for data collection, and reluctance of some WAEC/NECO officials to disclose detailed internal plans. Despite these limitations, the results are reliable and provide a sound basis for understanding the dynamics of CBT examination implementation in Nigeria.

Results and Discussion of Findings

The introduction of Computer-Based Technology (CBT) examinations in Nigerian secondary schools marks a major reform in the country's education system. Data collected from teachers, students, principals, and officials of WAEC and NECO reveal a mixture of optimism, skepticism, and concern about the implementation process.

The responses were analyzed under three major themes consistent with the study objectives:

1. Perceived benefits of CBT examinations,
2. Implementation challenges, and
3. Prospective strategies for successful adoption.

Response Rate

Out of the 400 questionnaires distributed across the six geopolitical zones, 384 were returned, representing a 96% response rate, which is considered highly satisfactory for academic

research. This strong participation indicates broad interest in the issue and its implications for educational standards in Nigeria.

Perceived Benefits of Computer-Based Examinations

Respondents generally agreed that CBT has the potential to curb examination malpractice, enhance grading accuracy, and promote transparency. A summary of responses is presented below:

Table 3: Perceived Benefits of CBT Examinations in Secondary Schools

Statements	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
CBT will reduce examination malpractices	64.3	28.6	5.1	2.0
CBT will improve result accuracy and credibility	70.1	22.7	5.4	1.8
CBT will enhance the digital literacy of students	68.9	24.2	5.6	1.3
CBT will save time and cost of exam marking	62.8	29.8	5.9	1.5
CBT will improve the quality of assessment	58.4	33.5	6.2	1.9

Source: Field Survey, 2024.

The table above indicates that over 90% of respondents agreed that CBT examinations will significantly curb examination malpractice and enhance the credibility of Nigeria's assessment system. This supports the view of Adewale (2021), who maintained that "computerization of testing promotes fairness, efficiency, and transparency in educational evaluation."

Teachers and principals from Taraba, Lagos, and Anambra states emphasized that CBT would reduce human errors associated with manual marking and result computation. Similarly, examination officials at WAEC and NECO confirmed that automation would drastically minimize paper leakages, impersonation, and result manipulation.

Implementation Challenges

Despite the overwhelming support for CBT, several critical challenges were identified. Respondents pointed to infrastructural inadequacies, unreliable electricity supply, limited access to computers, and poor digital readiness among students, especially in rural areas.

Table 4: Key Challenges Facing the Introduction of CBT in Secondary Schools

Challenges Identified	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Lack of adequate computer facilities in schools	75.5	20.7	3.0	0.8
Irregular power supply	78.2	18.1	2.3	1.4
Poor internet connectivity and bandwidth	68.5	23.8	5.7	2.0
Inadequate ICT skills among teachers/students	62.0	28.0	8.0	2.0
Insecurity and logistic challenges in transporting students to centers	59.3	30.1	8.5	2.1

Source: Field Survey, 2024.

These findings are consistent with the National Information Technology Development Agency (NITDA, 2023) report, which highlighted that over 60% of Nigerian public schools lack functional computer laboratories, while electricity access remains below 45% in rural areas.
Interview data from school principals also revealed concerns about equity and access — schools in urban areas like Lagos or Abuja may cope easily, but rural schools in Taraba, Zamfara, and Benue States would face severe challenges if the examination bodies implement CBT abruptly.
One principal from Gassol Local Government Area of Taraba State remarked:
> "The idea of computer-based exams is welcome, but it will fail if we start without providing basic ICT tools and electricity in rural schools. Students here have never even touched a computer."
This sentiment reflects a broader digital divide that could deepen educational inequality between Nigeria's urban and rural learners if not carefully addressed.

Logistical and Security Concerns

The study found that both WAEC and NECO plan to establish regional CBT centers across the country. However, movement of students from their schools to distant testing centers raises practical challenges related to transportation, accommodation, and security.
This is particularly worrisome in areas affected by insecurity — such as banditry in the NorthWest and insurgency in the North-East — which may make large-scale student movement risky.

Table 5: Logistical Risks Associated with

CBT Implementation	Frequency	Percentage (%)
Long-distance travel for students	238	62.0
Insecurity along examination routes	190	49.5
High transportation costs	162	42.2
Lack of temporary accommodation for students	145	37.8

Source: Field Survey, 2024.

The implication is that hasty implementation without infrastructural and security preparedness could jeopardize the safety of students and the credibility of the entire examination process.

Correlation Analysis

A Pearson correlation analysis was conducted to examine the relationship between the availability of ICT infrastructure and readiness for CBT implementation. The correlation coefficient ($r = 0.731$, $p < 0.05$) indicates a strong positive relationship, implying that increased ICT investment directly enhances the readiness of schools for CBT adoption.
This empirical evidence aligns with Ajayi (2020), who posited that "the success of digital education reforms depends primarily on the robustness of the supporting technological infrastructure."

Discussion of Findings

The findings demonstrate that while CBT examinations hold immense potential to transform Nigeria's educational assessment system, the readiness level of secondary schools remains alarmingly low. The disparity between policy ambition and infrastructural reality could threaten the success of the reform.

On the positive side, CBT is expected to improve assessment accuracy, reduce exam fraud, and enhance transparency.

On the negative side, poor infrastructure, weak ICT literacy, and insecurity present formidable obstacles.

This duality reflects what Rogers' Diffusion of Innovation Theory (2003) calls the "innovationdecision gap," where technology adoption fails when potential users are inadequately prepared.

If implemented haphazardly, the reform could replicate the early Unified Tertiary Matriculation Examination (UTME) CBT rollout (2015), where students faced system crashes, network failures, and massive anxiety. Lessons from that phase reveal the importance of gradual implementation, pilot testing, and capacity building before full deployment.

Therefore, for WAEC and NECO's proposed 2026 commencement of CBT to succeed, stakeholders must prioritize infrastructure, training, security, and policy coordination at both federal and state levels.

Conclusion

This study critically examined the introduction of Computer-Based Testing (CBT) in Nigeria's public examination systems, with particular focus on the West African Senior School Certificate

Examination (WASSCE) conducted by WAEC and the Senior School Certificate Examination (SSCE) administered by NECO. The analysis revealed that while the transition from paper-based to CBT assessments holds remarkable potential for improving examination integrity, efficiency, and transparency, its haphazard implementation without adequate infrastructural and human capacity preparation poses significant risks.

CBT represents a paradigm shift from traditional manual examination processes to a technologydriven assessment framework. It offers advantages such as faster result processing, reduction in examination malpractice, improved data security, and cost-effectiveness in the long run. However, the Nigerian context reveals substantial challenges — including inadequate ICT infrastructure, unreliable power supply, low digital literacy among students and teachers, insufficient computer facilities, and poor internet connectivity, especially in rural areas.

The study concludes that the premature or poorly coordinated implementation of CBT in WAEC and NECO examinations could lead to systemic inequalities, where urban schools benefit while rural schools are marginalized. It could also undermine examination credibility if technical failures, system malfunctions, or power outages occur during testing sessions.

Therefore, adopting CBT without addressing foundational infrastructure gaps may reproduce the very inefficiencies it was meant to eliminate.

If Nigeria must succeed in its national transition to CBT-based assessments, the process must be gradual, inclusive, and evidence-driven. WAEC and NECO must adopt a phased implementation strategy anchored on adequate preparation, pilot testing, and capacity building rather than political or administrative pressure for quick adoption.

Recommendations

1. **Comprehensive Infrastructure Assessment and Upgrade:**

Before full-scale adoption, WAEC and NECO should conduct nationwide audits of schools and examination centers to determine their ICT readiness. Facilities such as computers, stable electricity, and internet connectivity must be provided equitably across urban and rural regions.

2. **Phased Implementation Approach:**

CBT should be introduced gradually — starting with subjects that are theory- or objective-based and piloting in selected states before nationwide adoption. Lessons from these pilots should guide scaling up.

3. **Capacity Building for Teachers and Students:**

Intensive digital literacy programs must be organized for teachers, exam administrators, and students to familiarize them with CBT platforms. Continuous ICT training should form part of the school curriculum to close the digital divide.

4. **Collaboration with ICT Stakeholders:**

Partnerships with technology companies, telecommunications providers, and ICT experts are essential to ensure technical support, server security, and reliable broadband infrastructure.

5. **Provision of Alternative Power Sources:**

Power instability remains one of the biggest obstacles to CBT success. Examination bodies should provide backup power through solar systems or generators to avoid disruptions during testing sessions.

6. **Data Security and System Reliability:**

Strong cybersecurity frameworks should be instituted to protect examination data from breaches, hacking, or manipulation. Regular system testing and maintenance are equally critical.

7. **Inclusive Policy Design:**

Policies governing CBT adoption must be inclusive, ensuring that rural and low-income schools are not disadvantaged. Government intervention is needed to subsidize infrastructure and provide access to shared CBT centers.

8. **Public Sensitization and Stakeholder Engagement:**

WAEC and NECO must communicate clearly with school administrators, parents, and students about the rationale, benefits, and modalities of CBT. Awareness campaigns will help reduce anxiety and resistance to change.

9. Establishment of a National CBT Regulatory Framework:

The Federal Ministry of Education should establish a unified policy framework regulating CBT operations, setting minimum standards for technology use, center accreditation, and data protection.

10. Periodic Evaluation and Research:

Continuous monitoring and evaluation of CBT implementation will provide empirical data for improvement. Academic institutions should collaborate with WAEC and NECO to conduct studies on performance outcomes, user experience, and technical efficiency.

Table 6: Summary of Key Recommendations for Effective CBT Implementation in Nigeria

S/N	Recommendation	Expected Outcome	Responsible Institutions	Source
1	Infrastructure audit and upgrade	Improved ICT readiness	WAEC, NECO, Ministry of Education	Field Study, 2025
2	Phased implementation	Gradual, stable adoption	WAEC, NECO	Author's Analysis, 2025
3	Capacity building	Enhanced digital literacy	Schools, UBEC, State Ministries	Author's Compilation, 2025
4	ICT partnerships	Reliable technical support	NITDA, ICT Firms	Author's Analysis, 2025
5	Backup power provision	Reduced test disruption	Exam Bodies, States	Field Survey, 2025

Final Reflection

CBT has the potential to revolutionize Nigeria's educational assessment landscape, aligning it with global best practices. However, technology alone cannot guarantee examination integrity or quality. What determines success is the level of institutional preparedness, infrastructural adequacy, and inclusivity of implementation.

Nigeria's education authorities must therefore remember that digital transformation is not about replacing paper with screens, but about building systems that are fair, accessible, and resilient. A well-planned, ethically guided CBT rollout can strengthen credibility, but a hasty and uneven approach may deepen educational inequality and compromise learning outcomes.

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