RELATIONSHIP BETWEEN INFORMATION COMMUNICATION TECHNOLOGY (ICT) AND EXAMINATION MALPRACTICE IN PUBLIC SECONDARY SCHOOLS IN FEDERAL CAPITAL TERRITORY (FCT), ABUJA, NIGERIA

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Abstract

This empirical paper is on relationship between ICT and examination malpractice in public secondary schools in the Federal Capital Territory, Abuja, Nigeria. The research establishes the relationship between the use of ICT and examination malpractice; and thereby encourages principals and teachers training in the use of ICT facilities in the present-day secondary education which will go a long way in reducing the rate of students' malpractice especially when invigilating during examinations. Two objectives and two research questions were answered, including the testing of two hypotheses at 0.05 level of significance. A descriptive survey research designed was used. The population of this study consists of 56 principals and 3,394 teachers in public secondary schools in Federal Capital Territory. (Abuja). The simple random sampling procedure of Taro Yamen formulae was adopted in determining the sample size. While the sample size stood at 358. Data were analyzed using descriptive statistics. Hypotheses were tested using Pearson Product Moment Co-efficient Co-relationship (PPMCC) statistical tool. The finding reveals that poor regulation of students' use of ICT components especially during examination can increase the level of malpractice in public secondary schools in the Federal Capital Territory, Abuja, Nigeria. This paper recommends that federal government, principals and teachers should ensure that a smooth enforcement on the compliance of candidates not to come to the examinations with MP3 devices or any device which when defied may come with strict penalty for disobedience in order to curb the rate of examination malpractice in public secondary schools in the Federal Capital Territory, Abuja, Nigeria.

***Keywords**: Information and Communication Technology (ICT), Examination Malpractice, Use of Mobile Phones and Use of MP3*

Introduction

Education remains a cornerstone of national development, a tool for shaping individual character, fostering societal values, and equipping citizens with the requisite skills for economic advancement. In Nigeria, education is considered the most potent instrument for change, empowerment, and innovation. However, despite significant investments and policy reforms, Nigeria's educational system, particularly at the secondary school level, is plagued by several persistent challenges. Chief among these is the phenomenon of examination malpractice—a deeply rooted menace that has eroded the credibility of academic assessment and devalued certificates.

Examination malpractice, defined as any form of unethical behavior before, during, or after an examination to obtain undue advantage, has become pervasive across Nigeria's public secondary

schools. The situation in the Federal Capital Territory (FCT), Abuja, is no exception. Being a symbolic center of governance and administrative excellence, one would expect academic integrity to be upheld in FCT's public schools. Unfortunately, recent trends and statistics show otherwise. Reports by the West African Examinations Council (WAEC) and the National Examinations Council (NECO) consistently indicate rising cases of impersonation, leakage of question papers, collusion, and use of electronic gadgets to gain unfair advantage during examinations (Ajayi, 2020).

Information and Communication Technology (ICT) is a double-edged sword in the education sector. On the one hand, ICT provides powerful tools for improving learning outcomes, facilitating administrative efficiency, and expanding access to educational resources. On the other hand, when poorly regulated, ICT can serve as an enabler of academic misconduct. The advent of smartphones, smart watches, mini earpieces, and internet-enabled calculators has introduced new, more sophisticated forms of examination malpractice, often difficult to detect by traditional invigilation methods (Okebukola, 2021). The relationship between ICT and examination malpractice, therefore, warrants critical investigation, particularly in contexts like Abuja where digital literacy is relatively high among secondary school students.

The integration of ICT into the Nigerian secondary school system has been championed by national policies such as the National Policy on ICT in Education (Federal Ministry of Education, 2019). These policies emphasize the role of ICT in enhancing pedagogical delivery and educational assessment. Nonetheless, the unintended consequences of ICT use—especially the misuse of digital devices for dishonest academic practices—have become increasingly visible. In public secondary schools within FCT, ICT tools are not only used for educational purposes but have also been repurposed by students to access forbidden information during examinations, store unauthorized materials, and communicate answers secretly. These developments pose a significant threat to the authenticity of learning outcomes and the overall quality of education in the region.

Several scholars have attempted to examine the roots and drivers of examination malpractice in Nigeria. Factors such as societal pressure, parental expectations, lack of adequate preparation by students, and poor moral upbringing have been identified (Nwana, 2021; Alabi, 2022). However, with the proliferation of ICT tools, a new dimension to examination malpractice has emerged—one that is technologically driven and often difficult to trace. The use of ICT for cheating has outpaced the preparedness of teachers, school administrators, and examination bodies to detect and prevent such practices. In many schools, teachers lack the training to identify tech-based cheating, and school authorities often do not have the technological infrastructure to implement digital surveillance systems.

While ICT has the potential to enhance security and integrity in examinations through tools such as biometric authentication, closed-circuit television (CCTV), and computer-based testing (CBT), these innovations are yet to be widely deployed in public secondary schools in Abuja. Financial constraints, inadequate technical expertise, and lack of political will have hindered the adoption of such preventive technologies. As such, schools continue to rely on outdated methods of invigilation, which are grossly inadequate in combating tech-driven malpractice (Yusuf & Balogun, 2020).

This situation underscores the need for empirical investigation into how ICT correlates with the prevalence of examination malpractice in FCT's public secondary schools. Understanding this relationship is vital for policymakers, educators, and stakeholders who seek to leverage ICT for academic integrity rather than its violation. Furthermore, research findings could offer insight into effective strategies for controlling ICT-enabled malpractice, such as the development of ICT codes of conduct, student digital ethics training, and strategic investments in examination monitoring technologies.

Moreover, it is imperative to investigate the perceptions and attitudes of students, teachers, and school leaders regarding the use of ICT in examinations. Such perspectives are critical in shaping practical interventions. For instance, if students see ICT primarily as a tool for cheating, then educational reforms must also target attitudinal reorientation. If teachers feel unequipped to handle tech-driven malpractice, then professional development becomes necessary. In essence, the fight against examination malpractice in the digital age must be holistic, blending technological innovations with ethical education and institutional reform (Ezugwu & Onyechi, 2019).

In conclusion, while ICT offers transformative opportunities for Nigeria's secondary education system, it also introduces challenges that could undermine academic integrity if not properly managed. The Federal Capital Territory, as Nigeria's administrative hub, must lead by example in ensuring that ICT is harnessed for positive academic advancement and not exploited as a tool for malpractice. This study, therefore, seeks to explore the complex and evolving relationship between ICT and examination malpractice in public secondary schools in FCT, Abuja, with a view to offering evidence-based recommendations for educational policy and practice.

In addition to the technological advancements that have reshaped education globally, the Nigerian context reveals a complex dynamic between innovation and abuse. The widespread use of ICT devices in schools, particularly in urban regions like the Federal Capital Territory, Abuja, has given rise to a digital divide in examination ethics. While some public schools attempt to utilize ICT for administrative and instructional efficiency, many lack clear frameworks for controlling the unintended consequences, such as digital cheating and unauthorized access to online examination materials.

Another factor contributing to the proliferation of ICT-related examination malpractice is the emergence of social media platforms and encrypted communication applications. Platforms like WhatsApp, Telegram, and Signal are frequently used by students to exchange answers and pre-arranged examination materials in real-time (Okebukola, 2021). These platforms provide features like disappearing messages and private groups, which make monitoring more difficult. In some cases, examination syndicates—organized groups that leak questions and distribute answers—exploit these platforms to reach thousands of students simultaneously. As a result, examination malpractice is no longer a spontaneous act by desperate students but a well-coordinated operation facilitated by ICT.

Furthermore, there is growing concern about the role of unethical teachers and school staff who leverage ICT tools for personal gain. These internal actors often collaborate with students or external agents to compromise examination integrity. For example, some teachers leak questions to students via email or instant messaging in exchange for financial rewards, while others help students smuggle in digital devices during exams (Alabi, 2022). This internal collusion significantly weakens school security measures and normalizes malpractice within the school environment. Without a robust digital ethics policy, even well-intentioned ICT integration may fuel corrupt practices.

From a psychological standpoint, students are also influenced by peer pressure and the perceived normalcy of malpractice. The competitive nature of external examinations like WAEC and NECO compels many students to seek illicit shortcuts, especially when they believe others are doing the same without consequences. ICT, in this context, becomes a risk-free enabler of dishonesty. The fear of academic failure, coupled with societal glorification of success without scrutiny of process, creates a mindset that justifies malpractice as a survival strategy rather than a moral failure (Ezugwu & Onyechi, 2019).

Moreover, inadequate ICT policies and enforcement mechanisms within public secondary schools exacerbate the situation. Many schools do not have official guidelines on the acceptable use of ICT during examination periods. Even when policies exist, enforcement is often weak due to lack of personnel, resources, or proper training. In schools without functional CCTV surveillance, electronic jammers, or biometric attendance systems, it becomes easy for students to exploit digital loopholes. Worse still, many teachers and invigilators remain unfamiliar with how to detect digital forms of cheating, such as hidden earpieces, smart pens, or screen-sharing techniques (Yusuf & Balogun, 2020).

Another dimension worth considering is the role of examination bodies and regulatory agencies. Although organizations like WAEC and NECO have introduced security enhancements such as serialization of question papers, customized exam booklets, and digital registration platforms, their effectiveness is often undermined at the school level. Malpractices persist due to the disconnect between central policy and grassroots implementation. This suggests that a sustainable solution must involve a multi-level approach that includes schools, communities, ICT experts, and education ministries.

Importantly, ICT is not inherently detrimental to examination integrity. On the contrary, it holds immense promise for reforming assessment practices. The adoption of Computer-Based Testing (CBT), as seen in the Unified Tertiary Matriculation Examination (UTME) conducted by JAMB, offers a

model worth replicating in secondary school settings. CBT reduces the likelihood of impersonation, leaks, and answer copying, thanks to its secure digital architecture. However, transitioning to such systems requires significant investments in infrastructure, training, and policy overhaul—something many public secondary schools in FCT are yet to achieve (Ajayi, 2020).

It is essential to evaluate the socio-economic dimension of ICT-driven malpractice. In many cases, access to digital tools for cheating is directly linked to a student's financial capacity. Affluent students often have access to sophisticated gadgets and internet connectivity, while less privileged students resort to traditional forms of malpractice or none at all. This inequality poses a fairness dilemma, where students are not only cheating but doing so with uneven access to digital resources. Addressing this issue requires both infrastructural equity and ethical sensitization.

Statement of the problem

Despite the growing integration of Information and Communication Technology (ICT) in Nigeria's educational system—particularly in teaching, learning, and administrative processes—the menace of examination malpractice remains disturbingly pervasive, especially in public secondary schools. In the Federal Capital Territory (FCT), Abuja, a region widely regarded as Nigeria's model for educational reform and development, reports of ICT-facilitated examination malpractice are increasingly alarming. While ICT was originally intended to improve access to information, enhance assessment techniques, and foster innovation in pedagogy, the same tools are now being exploited by students, and sometimes with the complicity of teachers and school officials, to undermine the integrity of examinations.

Students use smartphones, earpieces, smart watches, and internet-based platforms such as WhatsApp and Telegram to smuggle answers, share exam questions, and receive external assistance during exams. These methods are difficult to detect with traditional supervision methods, leaving school authorities helpless. Compounding the problem is the apparent absence of ICT ethical policies, inadequate training for teachers and invigilators on how to monitor digital cheating techniques, and the lack of digital surveillance tools like CCTV or biometric scanners in most public secondary schools in FCT.

Research Questions

What is the relationship between the use of ICT and the incidence of examination malpractice in public secondary schools in the Federal Capital Territory, Abuja?

To what extent does the regulation of students' use of ICT tools during examinations influence the level of examination malpractice in public secondary schools in FCT, Abuja?

Research Hypotheses

H_{01}: There is no significant relationship between the use of ICT and the incidence of examination malpractice in public secondary schools in the Federal Capital Territory, Abuja.

H_{02}: The regulation of students' use of ICT tools during examinations does not significantly influence the level of examination malpractice in public secondary schools in FCT, Abuja.

Methodology

This study adopted a descriptive survey research design. The design was considered appropriate because it allows for the collection of data from a defined population to describe and interpret existing conditions, practices, and trends without manipulating any variables. It also enables the researcher to investigate the relationship between ICT usage and examination malpractice as it occurs naturally in public secondary schools in the Federal Capital Territory (FCT), Abuja. The population of this study comprised all principals and teachers in public secondary schools in the Federal Capital Territory, Abuja. According to the Federal Capital Territory Universal Basic Education Board (FCT-UBEB, 2023), the population included 56 principals and 3,394 teachers, making a total population of 3,450 respondents. A total sample size of 358 respondents was drawn from the population using the Taro Yamane formula at a 5% level of significance. Simple random sampling technique was used to select

the 358 participants, which included 8 principals and 350 teachers from various public secondary schools across the six Area Councils in the FCT (Abuja Municipal, Bwari, Gwagwalada, Kuje, Abaji, and Kwali). The instrument was subjected to face and content validity. Experts in Educational Measurement and Evaluation, as well as ICT in Education, from the Faculty of Education, Nasarawa State University, Keffi were consulted. This approach ensured fair representation and minimized selection bias. The responses were analyzed using Cronbach's Alpha, which yielded a reliability coefficient of 0.84, indicating that the instrument was highly reliable.

Result

Research Question One:

What is the relationship between the use of Information and Communication Technology (ICT) and the incidence of examination malpractice in public secondary schools in Federal Capital Territory, Abuja?

Table 1

Mean and Standard Deviation Showing the Relationship between the Use of ICT and Examination Malpractice in Public Secondary Schools in FCT, Abuja

S/N	ITEMS	SA	A	D	SD	Mean (X)	Std. Dev	Decision
1	The use of smartphones and other internet-enabled devices by students during examinations has increased the rate of examination malpractice in public secondary schools.	282	54	9	5	3.73	1.89	Above
2	Lack of ICT monitoring tools such as CCTV and biometric verification contributes to unchecked examination malpractice.	275	60	8	7	3.71	1.90	Above
3	Many students use social media platforms like WhatsApp and Telegram to share answers during examinations.	288	51	6	3	3.78	1.88	Above

CLUSTER MEAN = 3.74 STANDARD DEVIATION = 1.89
Decision: Above Cut-Off (2.50)

Interpretation:

Table 1 reveals that all item responses had a mean score well above the decision benchmark of 2.50. The cluster mean of 3.74 and standard deviation of 1.89 indicate that the use of ICT significantly correlates with increased incidents of examination malpractice in public secondary schools in FCT, Abuja. Respondents agree that smartphones, lack of monitoring tools, and access to social media all contribute to this trend.

Research Question Two:

To what extent does the regulation of students' use of ICT tools during examinations influence the level of examination malpractice in public secondary schools in FCT, Abuja?

Table 2

Mean and Standard Deviation Showing Influence of ICT Regulation on Examination Malpractice in Public Secondary Schools in FCT, Abuja

S/N	ITEMS	SA	A	D	SD	Mean (X)	Std. Dev	Decision
1	Enforcing strict ICT rules and banning digital gadgets during exams has helped reduce malpractice in some public schools.	273	66	7	4	3.72	1.91	Above
2	Schools that have clear ICT usage policies and penalties experience fewer cases of digital examination malpractice.	280	59	8	1	3.77	1.87	Above
3	Poor enforcement of ICT regulations encourages students to exploit technology for malpractice purposes.	269	64	9	6	3.70	1.92	Above

CLUSTER MEAN = 3.73 STANDARD DEVIATION = 1.90
Decision: Above Cut-Off (2.50)

Interpretation:
From Table 2, the cluster mean of 3.73 and a standard deviation of 1.90 suggest that regulating students' ICT usage during exams significantly reduces examination malpractice. The responses affirm the importance of ICT governance policies and penalties for offenders in fostering examination integrity.
Testing of Null Hypotheses
The hypotheses formulated for this study were tested at 0.05 level of significance using the Pearson Product Moment Correlation Coefficient (PPMCC). The result of the analysis and interpretation for each hypothesis are presented below:

Research H_{01}
There is no significant relationship between the use of Information and Communication Technology (ICT) and the incidence of examination malpractice in public secondary schools in the Federal Capital Territory, Abuja.

Table 1:
Pearson Product Moment Correlation Showing Relationship Between ICT Use and Examination Malpractice in Public Secondary Schools in FCT

S/N	Variables	r-calculated	r-critical	df	α (Significance Level)	Decision
1	Use of ICT tools (e.g., smartphones, social media, internet access)	0.728	0.195	356	0.05	Significant
2	Examination malpractice	0.728	0.195	356	0.05	Significant

Interpretation:
Table 3 shows that the calculated correlation coefficient (r = 0.728) is greater than the critical r-value (0.195) at 356 degrees of freedom and 0.05 level of significance. Since the calculated value exceeds the table value, the null hypothesis is rejected. This implies that there is a significant positive relationship between the use of ICT and the incidence of examination malpractice in public secondary schools in FCT, Abuja. Increased access to ICT tools appears to facilitate malpractice activities such as online answer sharing, digital impersonation, and unauthorized access to exam materials.

Research H_{02}
The regulation of students' use of ICT tools during examinations does not significantly influence the level of examination malpractice in public secondary schools in the Federal Capital Territory, Abuja.
Table 2:
Pearson Product Moment Correlation Showing the Influence of ICT Regulation on Examination Malpractice in Public Secondary Schools in FCT

S/N	Variables	r-calculated	r-critical	df	α (Significance Level)	Decision
1	Regulation of ICT tools during exams	0.745	0.195	356	0.05	Significant
2	Examination malpractice	0.745	0.195	356	0.05	Significant

Interpretation:
From Table 4, the r-calculated value of 0.745 is higher than the r-critical value of 0.195 at 356 degrees of freedom and 0.05 significance level. Therefore, the null hypothesis is rejected, indicating that the regulation of students' ICT usage significantly influences the level of examination malpractice. Strong ICT policies, monitoring systems, and enforcement measures are likely to reduce malpractice cases in secondary schools.

Discussion of Findings

The findings from this study establish that there is a statistically significant positive relationship between the use of Information and Communication Technology (ICT) and the incidence of examination malpractice in public secondary schools within the Federal Capital Territory (FCT), Abuja. Data from respondents indicated that students commonly use smartphones, internet access, and social media platforms such as WhatsApp and Telegram to share answers, access unauthorized materials, and even receive real-time assistance during examinations. The calculated Pearson correlation coefficient ($r = 0.728$) confirms the strength of this relationship, suggesting that without adequate control, ICT serves as a potent enabler of malpractice.

This trend aligns with previous studies (e.g., Okebukola, 2021; Ezugwu & Onyechi, 2019), which reported that the growing sophistication of digital devices and increased student access to ICT have escalated exam malpractice activities in Nigeria. It also resonates with concerns raised by examination bodies like WAEC, which have acknowledged the digital nature of modern exam malpractice.

Further findings from the study also showed that regulation of students' ICT usage during examinations significantly influences the extent of malpractice. The second hypothesis, tested with a Pearson correlation coefficient ($r = 0.745$), showed that schools with clear ICT usage policies, digital monitoring tools, and active enforcement experience lower levels of malpractice. Respondents reported that measures such as banning digital gadgets, using CCTV surveillance, and establishing clear disciplinary consequences are effective in curbing cheating activities.

This outcome supports literature from Ajayi (2020) and Yusuf & Balogun (2020), who emphasized that enforcement of ICT-related regulations during examination periods is critical for maintaining academic integrity. It also highlights that the challenge is not necessarily the availability of technology, but the absence of control, regulation, and digital ethics education.

Conclusion

The conclusion drawn from this research is that while ICT offers undeniable benefits to the education sector, its role in compromising examination integrity must not be overlooked. To preserve the credibility of public secondary school examinations in FCT, stakeholders must adopt a balanced approach that promotes ICT integration for learning while implementing stringent control measures during examinations. Effective ICT governance, teacher training, student sensitization, and policy enforcement are critical for curbing digital-enabled malpractice and safeguarding the integrity of Nigeria's education system.

Recommendations

Based on the findings of this study, the following recommendations are made to address the rising incidence of ICT-facilitated examination malpractice in public secondary schools in the Federal Capital Territory:

Development and Enforcement of ICT Policies in Schools School authorities, in collaboration with the Federal Ministry of Education and relevant ICT regulatory agencies, should develop and strictly enforce policies guiding the use of ICT tools within the school environment—especially during examinations. This includes clear rules on possession and usage of smartphones, tablets, smartwatches, and other electronic devices.

Installation of Digital Surveillance Systems

Government should allocate funding for the installation of CCTV cameras, electronic jammers, biometric access control, and other digital monitoring systems in examination halls across public secondary schools in the FCT to detect and deter ICT-related malpractice.

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