



Deployment of Technological Tools and Fight against Corruption in the Nigerian Educational Administration

Mathew Sunday Dada¹, Niyi Jacob Ogunode²

Faculty of Education, Department of Education Management, University of Abuja

Corresponding Author: Mathew Sunday Dada sunday.dada@uniabuja.edu.ng

ARTICLE INFO

Keywords: Corruption, Education, Technology

Received : 18 August

Revised : 19 September

Accepted: 18 October

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ABSTRACT

This paper examined the important roles technology can play in addressing the corruption programme facing the Nigerian educational sector. The paper is a position that depends on secondary data. The secondary data were collected from print and online publications. The paper concluded that technology can be used to combat corruption in the educational administration and management in Nigeria. The paper noted that technology, if applied effectively, can reduce corruption in personnel management, facility development, and procurement. The paper recommends that the government should adopt technology to fight corruption in all the ministries and agencies of governments. The government should provide and direct the use of technological facilities. The government should train staff on the use of modern technological facilities. Stakeholders in education should be encouraged to use technological facilities to report and expose corruption practices in the educational sector.

INTRODUCTION

The intricate coordination of staff, policies, procedures, and resources with the ultimate goal of enabling the efficient operation and enhancement of these educational establishments is known as educational administration (Timespro . com 2020). In order to efficiently and effectively accomplish particular educational goals, educational administration is the process of identifying, mobilizing, and utilizing limited human and material resources related to education (Kalagbor 2017). In order to accomplish the objectives of a program at an educational institution, educational administration focuses on integrating the proper human and material resources that are made available and made effective (Gift 2018).

Education administration is a wide-ranging field that includes several procedures, including: B. involvement in other management procedures, planning, coordinating, controlling, and formulating policies. Various programs and activities are meticulously planned by the head of the educational organization in order to accomplish these goals. Schools, colleges, or universities can all be considered educational institutions. Together with other educators, parents, and students, the head plans these events and activities, inspires team members, and guides and manages their work. In order to accomplish the educational program's objective, the head assesses the staff's performance and progress, gives them feedback, and, if required, modifies the institution's plans and programs. Educational administration is the sum of these procedures meant to realize or accomplish the school's objectives (Nwankwoala 2016).

The following programs and activities fall under the purview of educational administration at the institutional level, according to Kalagbor (2017): (a) determining the institution's or school's goals; (b) organizing academic or curricular and co-curricular activities; (c) creating timetables and schedules for various activities; (d) delegating tasks and responsibilities to staff members; (e) planning curricular and co-curricular programs; (f) leading and inspiring the institution's staff; and (g) coordinating the efforts of individuals to accomplish the goal. (h) exerting control over the employees; (i) reviewing the institution's successes, shortcomings, and progress on a regular basis; and (j) implementing staff development initiatives. (k) Keeping things in order and discipline; (l) Managing materials; (m) Managing finances; (n) Keeping records and registers current; (o) Preserving human relations; (p) Monitoring the work of teachers and other staff members; (q) Providing feedback to teachers who are performing well and taking corrective action for those who are not.

LITERATURE REVIEW

From the above, educational administration in this paper consists of all processes, practices, and principles for the implementation of educational institutions goals in an efficient and effective way leading to the realisation of educational goals. These educational institutions include basic education, primary and secondary schools, colleges, universities, and non-formal educational institutions. Educational administration is the systematic

arrangement of educational resources for the execution of educational programs for the attainment of educational goals.

The importance of educational administration, according to Timespro (2020), includes;

Resource Optimisation:

The effective distribution of resources is one of the core responsibilities of school administrators. This is due to the fact that money is essential to any organization or community (Ayeni, 2017). Budgets, personnel, physical facilities, and instructional materials are all included in this. They work to maximize these resources' educational impact, making sure that every dollar spent enhances students' educational opportunities

Quality Assurance

Academic standards are protected by educational administrators. They oversee curriculum development, assess and improve instructional strategies, and keep a careful eye on student progress. This steadfast dedication to excellence fosters academic excellence and enhances the school's reputation.

Policy Implementation

Policy, regulation, and guideline frameworks govern how educational institutions function. Implementing and upholding these policies is the responsibility of education administrators. This can include anything from following safety procedures to curriculum standards.

Leadership and Vision

Education administrators are leaders with a deep vision for the institution's expansion and development, not just bureaucrats. Thus, leadership at all levels determines how successful or unsuccessful a human society or organization is (Muhammed and Ayeni, 2018). The leadership in the educational administration inspires and motivates faculty, staff, and students to work cohesively toward educational goals. All in all, leadership is important in education. These leaders can either enhance national development or retard development by employing bureaucratic bottlenecks (Asaju & Ayeni, 2020). The role of leadership in every sector is germane in national transformation, especially the role of educational leadership.

Student Well-being:

The well-being of students is a central concern of educational administration. They diligently ensure a safe, nurturing and supportive learning environment in which the holistic academic and personal development of students is a priority. This is because a good welfare package and the provision of social amenities ought to be provided to the people to bring about sustainable development (Ayeni, Tusayi, Joseph & Obatayo, 2018, p. 101). Corruption has been found to be a barrier to improving student welfare. For

instance, academics contend that corruption threatens Nigerians' well-being and long-term peace (Ayeni and Sani, 2021).

Educational administration in Nigeria is plagued with corruption. According to a 2003 World Bank report, over 67% of respondents in the education sector claimed that bribery occurred on a daily basis. In its 2020 annual report, Transparency International asserted that corrupt officials embezzle 66% of the funds provided by the Nigerian government for education. The Economic Community of West African States (ECOWAS) has widespread corruption in its educational systems, the report claims (Premium Times 2020). The effect of corruption on people is destructive. In fact, corruption in Nigeria is noted to be a source of worry and concern as it affects the national economy (Amaechi, Ayeni, & Madu, 2019). The recruitment of unqualified or inappropriate individuals to teach at the primary, secondary, or tertiary levels; extortion of entrance fees; errors in examinations; diversion of revenue to and within the sector; operation of illegal academic institutions, especially at the tertiary level; abuse of power and procurement rules by management and boards of both academic and regulatory institutions; sex for brand and procurement fraud are just a few examples of the ways corruption in education administration can appear.

The negative impact of corruption on educational administration in Nigeria includes educational wastage, shortage infrastructure facilities, inadequate professional teachers, poor quality of education, half-cake graduates, ineffective supervision, poor implementation of curriculum, high out-of-school children, poor staff training, poor motivation, inadequate educational institutions, admission of unqualified students, and strike actions (Okoro, 2010; Ololube, 2016; Ogunode & Oladele, 2019; Stephen, 2021; Ogunode & Johnson, 2021; Ogunode, Ohunene, & Olatunde-Aiyedun, 2022). The reason why there is a need to fight corruption is to ensure a state of not being monetarily, emotional, psychological, and essentially endangered (Ayeni & Beji, 2018).

Corruption is a very big problem in the Nigerian educational system, responsible for the underdevelopment of the sector. In order to curtail the corruption in the system, the government has formulated many policies and programs and implemented many measures to address the problems of corruption. Many scholars and international institutions have advised the Nigerian government to fully deploy technology in the fight against corruption in educational institutions, especially in the educational administration. It is based on this that this paper seeks to examine the important roles technology can play in addressing the corruption program facing the Nigerian educational sector.

Concept of Technology

Technology is the development and enhancement of human life through the application of knowledge gleaned from scientific discoveries. These are the industrial and mechanical arts that use math and science to solve problems for people. Every definition seems to indicate that human life has evolved and

improved. As a result, the economic, social, ethical, and aesthetic aspects of technology vary depending on how, where, and under what conditions it is used. For instance, educational technology is used to help students use their hands and brains, apply scientific concepts and knowledge to improve their surroundings, make work easier, cultivate a positive attitude toward work and productivity, and use critical thinking to foster creativity. There is an inherent connection between science, technology, and mathematical knowledge (Zakariyya and Bello 201; Deniran & Odebode 2018).

Technology is the methodical application of organized knowledge, such as science, to a particular task. It concerns the process and the product. The application is the process, and the end product—which consists of both software and hardware—is the outcome of the application. Technology is the actual use of knowledge, particularly in a particular field, to accomplish particular goals. Technology, which is a major driver of economic growth, is simply the application of scientific or other knowledge in real-world settings (Alabede 2017). Technological tools include information communication technology and other digital facilities (Ogunode, Adamu & Ajape 2021; Ogunode, Babayo, Jegede & Abubakar 2021; Ogunode, Abubakar, Abashi, Ireogbu, & Longdet 2021). According to Vannili (2015), resources in information and communications technology are tools that people use to work with the information and communications processing needs of an organization. It consists of the network, computer hardware, software, and a number of additional devices, such as cameras, audio, video, and photography. that transform data (text, pictures, sound, motion, etc.). into a standard digital format. ICT resources are much more relevant to university teaching and learning activities and have a greater variety of applications and uses. Tinio (2003) defines information and communication technology as a broad category of technological resources and tools used for information creation, dissemination, storage, and management. Computers, the Internet, broadcast technologies (television and radio), and telephones are some examples of these technologies. ICT, according to Tinio, is the combining (convergence) of computer networks with telephone and audiovisual networks using a single cabling or connection system. technological instruments, such as artificial intelligence, digital facilities, and ICT. It is possible to prevent and reduce corruption in education by utilizing all of these technological opportunities (Gronlund, Heacock, Sasaki, Hellstrom, and Al-Saqaf, 2010; Ogunode, 2020; Ogunode, Jeged, & Musa, 2020).

From the above, technology in this paper is the application of conceptual knowledge and scientific methods on issues or problems and to achieve practical goals. Technology is the use of scientific knowledge and findings to solve solving human problems via practical methods. Technology involves all tools, machines, software, processes and systems that are used to find solution to human problems.

Concept of Corruption

According to Khan et al., corruption is the improper and illegal actions of public servants, including politicians and civil servants, whose jobs give them the chance to siphon off funds and assets from the government to themselves and their partners. , 2012) . Corruption is the mistaken attitude of individuals toward certain social expectations that creates negativity and is present in all facets of society, including the social, religious, educational, and economic spheres (Dike 2003). According to Milovanovic (2001), corruption involving bribery and other unethical methods to accomplish certain evil objectives is a sign of a dysfunctional society.

According to Adebanjo (2014), corruption is defined as an immoral and criminal act, an attitude of injustice, and the tendency to act dishonestly by breaking the law, morals, and ethical standards of society. The systematic use of public office for private benefit has also been defined as corruption, which has a substantial impact on equity, quality, and access to education (Hallak and Poisson, 2002; Nwankwo & Nweke, 2016). Corruption is a widespread issue that has affected the economies and educational systems of many countries. The primary school leaving certificate exam questions were leaked in 1906, marking the first known instance of corruption in Nigeria's educational system (Asiyai, 2000).

Corruption worsens social division, poverty, inequality, and the environmental crisis while undermining trust, undermining democracy, and impeding economic growth. Only when we comprehend the mechanisms that facilitate corruption will we be able to expose it and hold those responsible. In order to launder and conceal their illegal assets, corrupt individuals frequently rely on professional assistants like bankers, attorneys, accountants, and real estate brokers, as well as opaque financial systems and anonymous shell corporations. Corruption adjusts to various situations and shifting conditions. It may change in reaction to modifications to laws, regulations, and even technological advancements (Transparency International, 2020).

According to the aforementioned, corruption in this document is defined as any illegal activity, dishonest conduct, or criminal act carried out by a person or organization in charge of managing resources, possessing the resources necessary to commit illegal acts, or ensuring that institutional objectives are met and profits are generated. The misuse of power or authority for one's own benefit is known as corruption. Corruption is when people in positions of power intentionally do something dishonest in order to win favor. Double dealing in an office or organization, as well as the giving or receiving of bribes or improper gifts, are examples of corruption. Corruption occurs when authority or power is actually abused for institutional or personal benefit.

METHODOLOGY

Review on Technology Deployment for the Fight against Corruption in the Educational Administration

Technological devices can be used to fight corruption practices in the educational sector. There is much evidence that has shown that the use of

technological facilities and devices is effective in combating corruption in all aspects of education. Independent post (2023) established that a group of Nigerian citizens used Twitter to raise awareness of a \$2.1 billion oil subsidy scam. The scandal led to the resignation of the Minister of Petroleum Resources and the arrest of several high-ranking officials. In 2016, a Nigerian citizen used a whistleblowing platform to report that a government contractor had inflated the price of a contract by \$10 million. The contractor was subsequently fired, and the government saved \$10 million. In 2017, a group of Nigerian citizens used a data analytics tool to identify patterns of corruption in the government's procurement process. The tool identified that a particular government agency was awarding contracts to companies owned by the agency's officials. This information was used to launch an investigation, which led to the arrest of several officials.

According to a 2010 United Nations report, ICT can promote democracy and human rights by facilitating and growing public social mobilization. A key element of a functioning democracy is an informed and engaged populace that can exert pressure on national institutions to be responsible and sensitive to the needs and priorities of the people. It is now believed that having access to communication channels—especially electronic ones—is essential to development and, as such, ought to be regarded as a social and economic right.

ICTs can also be used to create art that raises awareness and mobilizes people. A group of musicians in Tanzania called Chanjo is working together to combat corruption using social media, mobile devices, and art. The Chanjo Project's format includes nationwide tours and concerts, which are followed by open forums and discussions regarding corruption. Songs about corruption issues are freely distributed via mobile devices and the Internet as part of the artists' Tanzanian music tour. Between October and December 2011, the project reached nearly 11,000 people via social media and the Internet (Spider, 2011; Henry and Osita, 2018).

According to the United Nations (2010), information and communications technology (ICT) has been identified as an effective tool to curb corruption by improving the transparency and accountability of government administration. ICT has been assigned many roles, and one of them is that it can support the fight against corruption through governance systems by increasing accountability through digital footprints, increasing transparency through the publication of regulations and fees, and reducing face-to-face interaction, where this is most desired because bribes usually occur. Mobile phones as one of the ICT gadgets can effectively empower citizens by allowing them to collectively collect and share evidence of corrupt practices. In other words, ICT can effectively support citizens who are willing to challenge the systems that condone corruption.

ICT can help to combat the huge corruption practices in personnel management of ghost workers, facility development, and procurement. In the area of personnel management, an integrated data system like the IPPIS can be used and big data. These facilities will help to reduce ghost staff in the educational institutions. ICT can sustain transparency and accountability in

educational institutions (Meerabai, 2015; Dada, Ishaya, Ogunode, 2021; Dada, Olowonefa, & Ogunode, 2022).

Digitalisation of procurement processes can help to reduce the huge corruption in procurement in the various educational institutions. Shim and Eom in Henry and Osita (2018) studied the correlation between the usage of ICTs (measured by the UN e-government readiness index, the UN e-participation index, and the level of internet penetration) and the level of corruption (measured by Transparency International's CPI). They conclude that the country's position on the e-readiness and e-participation indices is negatively correlated with the levels of corruption, meaning that a good positioning on the e-readiness and e-participation indices goes together with lower levels of perceived corruption.

RESEARCH AND RESULT

There are several technologies and tools that can be applied in the fight against corruption in educational management, according to Razak (2023), such as:

Data mining:

Data mining is utilized in government procurement auditing to track bid times, spot warning signs, and spot collusion and disinformation patterns. Similar to this, data visualization is used to find "corrupt intent" in payments or transactions. Often created especially to identify and address fraud, anti-corruption software tools include "intelligent mining" of documents and administrative processes.

Big Data:

In order to stop fraud and misuse in the public sector, new data management strategies are being developed. Predictive analytics and visualizations that identify trends, patterns, and relationships in vast amounts of data have been applied in the fields of public health, trade, and taxation in order to produce insightful information.

Forensic tools:

Self-monitoring, analysis and reporting technology (SMART) is one of auditors' forensic tools designed to address corruption risks. While risk assessment algorithms aim to identify or stop potentially fraudulent payments, these tools can handle data speeds that include real-time transaction analysis, predictive modeling and anomaly detection.

Whistleblowing tools:

Information and communications technology (ICT)-based whistleblower tools are comparable to crowdsourcing platforms in that they enable the public to report wrongdoing by public officials. Although supporting law enforcement is their primary objective, they occasionally also hope to inspire voter mobilization against dishonest elites. The BKMS® compliance system and

GlobaLeaks, an open source program that can be customized for various environments, are well-known examples.

Blockchain:

Governments could use blockchain to track household spending, store land records and business registers, or change contract and payment systems, among other public transactions and documents.

Artificial Intelligence (AI):

With its ability to learn data structures, AI can potentially uncover hidden relationships, such as corruption, and can be used for more precise prediction models. AI is an infrastructure that enhances human security (Ayeni, Andeshi, & Uzoigwe, 2022). The inevitable role of infrastructure makes the responsibility of safeguarding the economy through infrastructure lie with the Nigerian state (Ayeni, 2024, p. 228). Many governments own tertiary institutions have been employing infrastructure like AI to stage a fight against corruption in the education administration to enhance efficiency. Therefore, the refusal to implement a capital budget on infrastructure has negatively affected the participation of people in economic activities (Ayeni, Sani, Idris, & Uzoigwe, 2019, p. 269). The inadequate infrastructure of AI-orientated education administration has affected the fight against corruption.

Digital public services and e-governance

Officials and citizens have fewer direct points of contact thanks to these initiatives. By automating procedures, they remove the chance for officials to misuse their latitude. This includes using ICT to deliver public services to citizens, especially the Internet, web-enabled devices, and electronic data management systems. Razak (2023) came to the conclusion that anti-corruption efforts will surely continue to be greatly aided by technology.

Jimoh, Folorunso, and Garba (n.d.) specifically highlight the role or application of ICT devices in tacking or curtailing corrupt practices as follows:

- Giving and accepting bribes by parents, visitors, and teachers: Installation of Closed Circuit Television (CCTV) cameras or surveillance within the school environment, such as classrooms/lecture halls, the principal office, staff rooms, the school library, laboratories, etc., can help greatly to minimise, if not totally eradicate, all corrupt practices in schools.
- Illegal admission and examination fees as well as examination malpractices: Websites can be designed to report cases of illegal corrupt practices by schools to authorities concerned so as to prosecute the offenders. Admission and registration processes can be automated to curtail such acts.
- Examination fraud, e.g., special/magic centres where examination malpractices take place: Examination complaints websites can be developed purposely for that to capture all reported cases of those

centres involved in such practices so that appropriate sanctions can be placed on the schools involved.

- Impersonation during examination: To eradicate examination impersonation, computerised examination card readers can be introduced by all examination bodies that capture the students' photograph, fingerprints, and Examination Identity Number (EIN) on the card.
- Preferential promotions and placements for teachers: Appointments, promotions, and placement of employees can be done electronically using Personnel Promotion Appraisal Software (PPAS) with a good security mechanism so as to deny intruders or unauthorised access to the database and the site.
- Illegal charging of students for tutoring services to cover the curriculum needed to pass the mandatory examination that should have been taught in the classroom: These practices can be curbed or reduced in a process of reporting the cases to the authority concerned using dedicated websites with a special informant tasked with that responsibility. And all forms of legal payments can be electronic with an account provided by the school authority.
- Illegal textbook procurement, illegal increase in meal funds, and infrastructure contracting: Procurement of infrastructure, textbooks, and food stuffs must be done by governments following due process and procurement rules. Electronic transaction platforms can be helpful to achieve the procurement. Any administrator at any level of authority will not be allowed to have access to raw cash.
- Misuse or abuse of attendance registers (i.e., appending of signatures for a colleague while he/she is actually absent): The Computerised Attendance Register System (CARS) can be provided by school administrators.
- Illegal relationship between teachers and female students/sexual harassment: With the use of mobile phones, students can tactically record the voice of the teacher blowing the whistle whenever he makes an attempt to demand any sexual gratification or report the case to the complaints website for prosecution (Jimoh, Folorunso, and Garba, n.d.).

ICT can help instil accountability in public institutions. ICT can be used to report corruption in educational institutions. ICT can be used to investigate corruption and facilitate stakeholder participation and government-community interactions. One of the reasons for fighting corruption is to increase access to education (Ayeni, 2017). ICT can be used to curtail the problem of ghost workers in educational institutions. Procurement management in a highly corrupt environment like Nigeria requires technical and technological skills to manage the process. By providing or using a centralised platform for managing procurement activities, the system promotes fair competition and reduces the risk of corruption. The Independent Corrupt Practices and Other Related Offences Commission (ICPC) in Nigeria is a public institution with a saddle to fight corruption in public institutions that relate to public officers. The

commission, with the aid of ICT, has exposed, recovered, and investigated a lot of corruption allegations in public institutions. However, when a structure like a government agency like ICPC fails to perform its expected role, there is bound to be negative consequences (Ayeni & Nwaorgu, 2018; Joseph, Cinjel & Ayeni, 2017).

FINDING

This paper revealed that technological facilities can play a great role in combating corruption in educational administration and management. The paper concluded that technology can be used to fight corruption in the educational administration and management in Nigeria in the areas of personnel management, facility development, and procurement.

CONCLUSION AND RECOMMENDATIONS

This paper examined the important roles technology can play in addressing the corruption program facing the Nigerian educational sector. The paper concluded that technology can be used to combat corruption in the educational administration and management in Nigeria. The paper noted that technology, if applied effectively, can reduce corruption in personnel management, facility development, and procurement.

The paper recommends that the government should adopt technology to fight corruption in all the ministries and agencies of governments. The government should provide and direct the use of technological facilities. The government should train staff on the use of modern technological facilities. Stakeholders in education should be encouraged to use technological facilities to report and expose corruption practices in the educational sector.

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