

Impact of Multiple-Choice Randomization (MCR) on Examination Malpractice at the Basic Education Certificate Examination in Ghana

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Presentation Outline

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Introduction

- ❑ **Eguridu (1997) asserts that the West African Examinations Council (WAEC) consistently adheres to internationally accepted principles of evaluation and assessment to uphold the validity and reliability of its examinations and certifications.**
 - ❑ **Strict rules and regulations govern the conduct of all WAEC's examinations. However, some candidates engage in examination malpractices to achieve success.**
- Nwahumenya (2004) describes examination malpractices as any act of omission or commission intended to help a candidate pass an examination without relying solely on their own capabilities.**

Introduction (Cont'd)

- ❑ **According to Obidoa et al. (2013), the root causes of examination malpractice may include lack of student commitment to academic work, ineffective teaching and learning methods, poor supervision during examinations, limited opportunities at higher levels of education, and overemphasis on paper qualifications.**
- ❑ **Akuffo-Badoo and Vanderpuije (2015) emphasize that examination malpractice has become institutionalised, involving students, teachers, non-academic staff, and even parents and relatives.**
- ❑ **In Ghana, Act 719, the WAEC Law was enacted in 2006 to outline punitive measures against offenders. The establishment of functional counseling services in schools was also recommended as a preventive strategy.**

Types of Examination Malpractice

WAEC categorises examination malpractice into the following:

- ☐ **Bringing Foreign Materials into the Examination Hall**
- ☐ **Irregular Activities inside or outside the Examination Hall**
- ☐ **Collusion**
- ☐ **Impersonation**
- ☐ **Leakage of Question Papers**
- ☐ **Mass Cheating**
- ☐ **Insult/Assault on Examination Officials**
- ☐ **Non-Compliance with Examination Instructions**
- ☐ **Use of Mobile Phones**
- ☐ **Emerging Forms of Malpractice**

Statement of the problem

- ❑ **The persistent and evolving nature of examination malpractice in Ghana poses a significant threat to the credibility of educational assessments, despite WAEC's implementation of internationally accepted practices (Eguridu, 1997).**
- ❑ **Although interventions such as candidate sensitization, media campaigns, technological aids (e.g., metal detectors), have been instituted, these strategies appear insufficient in curbing the menace (Abdulrazaq & Alawaye, 2008)**
- ❑ **The introduction of randomised test items in 2021 BECE marked a significant innovation aimed at enhancing test security and discouraging collusion (WAEC Ghana, 2021).**
- ❑ **However, the effectiveness of the multiple choice randomisation technique remains under-explored in the Ghanaian context.**

Research Questions

- ☐ **What are the trends and underlying factors influencing the number and types of examination irregularities recorded by the Council from 2020 to 2024?**
- ☐ **To what extent has multiple choice randomisation impacted examination malpractice at the BECE?**

Methodology

- ❑ **The study employed the descriptive research design and sample survey techniques.**
- ❑ **A summary data of malpractice cases was collected from WAEC (Ghana Examinations Committee) reports.**
- ❑ **A standard interview guide was developed by the researchers for data collection.**
- ❑ **Thirty senior staff of WAEC were purposively sampled and interviewed for the qualitative analysis.**
- ❑ **The data was analysed thematically.**

Results and Discussion



Research Question 1: What are the trends and underlying factors influencing the number and types of examination irregularities recorded by the Council from 2020 to 2024?

- ❑ Table 1 shows data on examination irregularities presented over a five-year period (2020–2024).**
- ❑ The types of irregularities include bringing foreign materials into the examination hall, use of mobile phones, collusion, impersonation, registration of unqualified candidates, and other irregular activities.**
- ❑ These trends underscore the dynamic nature of examination malpractice and the need for responsive policy and administrative interventions.**

**Research
Question 1
Cont'd**

Table 1

Examination Malpractice Cases by Type for BECE (School Candidates)

Type of Irregularity	2020 n (%)	2021 n (%)	2022 n (%)	2023 n (%)	2024 n (%)
Bringing Foreign Material	369(0.07)	122(0.02)	381(0.07)	287(0.05)	339(0.06)
Collusion detected in objective scripts	0(0)	0(0)	0(0)	0(0)	0(0)
Mobile Phone	41(0.01)	52(0.01)	73(0.01)	57(0.01)	45(0.01)
Collusion reported by Supervisor	55(0.01)	18(0)	79(0.01)	43(0.01)	38(0.01)
Collusion Detected in Essay Scripts	9(0)	270(0.05)	873(0.16)	431(0.07)	1590(0.26)
Impersonation	0(0)	2(0)	0(0)	0(0)	1(0)
Registration of Unqualified Candidates	1(0)	0(0)	0(0)	0(0)	0(0)
Other Irregular activities	2(0)	0(0)	0(0)	19(0)	13(0)



Research Question 2: To what extent has multiple choice randomisation impacted examination malpractice at BECE?

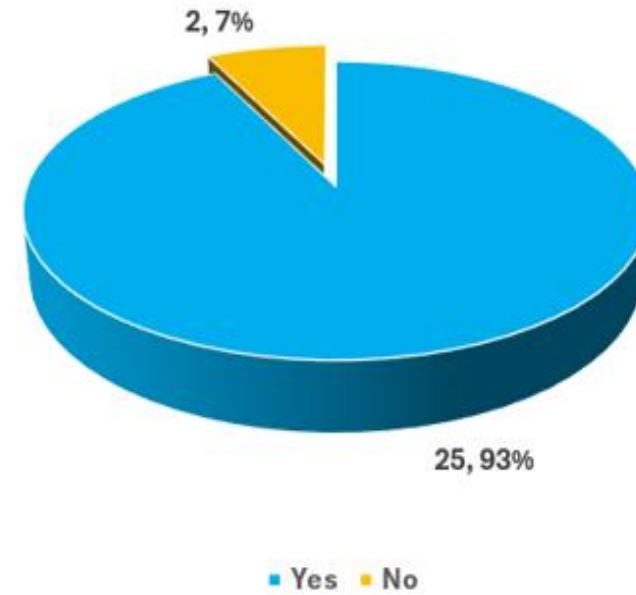


Perception of Impact

Figure 1

Perception of the Impact of Randomisation on BECE

Has Randomisation reduced Malpractice?





Thematic Analysis



The following themes were derived from the qualitative analysis

- 1. Clear Understanding and Consistent Interpretation of Multiple-Choice Randomisation (MCR)**
- 2. Reduction in Traditional Forms of Examination Malpractice**
- 3. Emergence of Sophisticated and Organized Malpractices**
- 4. Implementation Challenges in MCR**
- 5. Recommendations to Improve MCR**

Key Findings

- 1. A notable shift from objective-based to essay-based collusion**
- 2. Mobile phone-related malpractice remained relatively stable throughout the years**
- 3. Appreciable knowledge of WAEC officers on MCR.**
- 4. A notable improved reporting protocols among examination personnel.**
- 5. Irregularities like impersonation and registration of unqualified candidates remained low over the years.**
- 6. Majority of WAEC officers (representing 97%) believed that MCR has reduced examination malpractice in the BECE.**
- 7. Logistical and operational challenges are factors impeding the successful implementation of MCR.**
- 8. Performance Contracts and School Rankings or District League Tables are factors contributing to examination malpractice.**

Recommendation

- 1. WAEC should consider extending the MCR policy beyond objective questions (Paper 1) to include sections of essay-type questions (Paper 2 and 3)**
- 2. Transition from center or district level MCR to candidate-specific MCR.**
- 3. Transition towards Computer-Based Testing (CBT), especially for multiple-choice assessments.**
- 4. WAEC should deploy CCTV surveillance in examination centers to detect and respond to suspicious activities in real-time.**
- 5. Continuous capacity building for invigilators, supervisors, and examination officers is essential.**
- 6. Effective public awareness and stakeholder sensitisation campaigns must be conducted to educate all stakeholders**



Conclusion

While MCR has achieved tangible results in disrupting some forms of examination malpractice at the BECE, it must be integrated within a broader, systemic, and technology-enhanced framework to achieve sustainable impact.

Strengthening security, enhancing stakeholder accountability, and transforming the broader educational culture are critical to upholding the integrity of national assessments in Ghana.

THANK

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