ENHANCING SECURITY CONTROL IN SUSTAINING THE GAINS MADE IN ADDRESSING KCPE AND KCSE EXAMINATION IRREGULARITIES IN KENYA

1*Jane J. Barus
Kenya School of Government
*Corresponding Author’s E-mail: jane.barus@yahoo.com

2Samuel K. Marigat & 3Samuel N. Njathi
Kenya School of Government

Abstract

Purpose: The purpose of this study is to enhance security control in sustaining the gains made in addressing KCPE and KCSE examination irregularities in Kenya.

Methodology: To address the problem of examination irregularities, a situational analysis was conducted so as to identify the possible causes of the problem and measures to take in order to mitigate the challenge of cheating.

Results: Positive changes have been observed in the education sector in Kenya since the new cabinet secretary instituted measures to curb cheating in national examination and synergy has been felt within the state. The Ministry of Education, ministry of Interior and Coordination of National Government and the Ministry of Information, Communications and Technology should continue collaborating to ensure that the gains already made are improved and sustained.

Unique contribution to theory, practice and policy: Examination is both security and also a reputation concern of any nation. School and national examination should always be credible. Gains already made must be safeguarded. To this end every stakeholder has a role to play. Security control system should be continuity monitored and improved.

Keywords: security, control, gains, KCPE, KCSE, examination, irregularities
1.0 INTRODUCTION

1.1 Background Information

Examinations across the world play a critical role in the education system. Unfortunately, the process of examinations is greatly affected by the act of cheating hence giving a wrong impression on the results (Kibogo, 2016). Examinations are not only a tool that learners are assessed as to whether they have acquired the right knowledge or not but they are also used as instruments of assessing the progress of learners in the education system and to promote them to the next level of study (Muchai 2014; Akaranga & Ongong’a, 2013). The occurrence of examination irregularities can seriously damage public confidence in the validity and legitimacy of examination and assessment results and should be dealt with as a matter of urgency within the educational framework. According to The World Bank Group (2001) malpractice in public examinations refer to a deliberate act of wrongdoing, contrary to official examination rules, and is designed to place a candidate at an unfair advantage or disadvantage. Cheating in examinations is a common contemporary problem affecting systems of education all over the world, Kenya included. Cheating in exams is a world-wide problem. According to a survey carried out in the United States of America, four out of five students in the USA admitted having cheated at some point (Educational World, 2006). Similarly, in another study, nine out of ten high school teachers acknowledged exam cheating problems in their schools.

The concept of examination security refers to the safeguarding of classified information, materials and people who have access to the examination information (Wango, 2010:247). The immense human numbers involved in these examinations, including the candidates themselves, should practice and embrace sustainable examination security measures at all costs. Wiliyat (2009) in The Journal of Education and Practice by Akaranga (2013) observed that learners will do anything possible to pass examinations as this would be used to make decisions on their performance, education advancement and job opportunity. Farrant (1993) posits that some people regard examinations as a challenge to try to beat the system. For them, examinations are a kind of a game that can be won if you know enough tricks and exercises the right skills. This partly implies the motive behind malpractices. It is potent of the backwash effect of the examinations upon the studied curriculum. This is where candidates remain reluctant to read / revise until, and unless, they access the specific leakage of the forthcoming papers (Shiundu and Omulando, 1992).
In Kenya prior to 2016 reforms in the administration of examinations, KCSE examination irregularities had taken an upward trend as indicated in the table below:

**Table 1: Examination Irregularities**

| S/No | YEAR | No of Cheating Cases |
|------|------|----------------------|
| 1    | 2011 | 7,974                |
| 2    | 2012 | 1,700                |
| 3    | 2013 | 3,812                |
| 4    | 2014 | 2,975                |
| 5    | 2015 | 5,101                |
| 5    | 2016 | Nil                  |

Source: ([http://www.knec.ac.ke/](http://www.knec.ac.ke/))

KCPE and KCSE are high stake examinations in Kenya. This is due to the premium attached to passing exams which has led to mismanagement and massive malpractices in the exams. The causes responsible for cheating in national include societal factors, education system and personal characteristics (Kibogo, 2016). Students are drilled more in rote learning and passing exams than in the practical application of knowledge, skills and attitude in life and at the workplace hence completely defeating, the main purpose of an examination since unqualified students are enrolled in degree programs they were not fit for.

At the beginning of 2016, the Education Cabinet Secretary indicated that Ministry Of Education would not tolerate exam cheating and announced several measures that would go along way to ensuring that credible examinations were offered. He instituted radical measures which included: reconstituting the Kenya National Examinations Council, reorganized the school terms and brought on board the Ministries of interior and Coordination and ICT. The adoption of a multi-sectoral examination administration approach was a game changer. The Cabinet Secretary personally oversaw the supervision of the examinations with other senior education officers. Further, there were additional security measures during the distribution of the papers and the candidates were also taken through rigorous checks and were not allowed to get into examination rooms with clip boards and geometrical sets. The exam papers were also highly secured in over 300 metallic containers in the various county commissioners offices countrywide. The Heads teachers and Principals were instructed to collect the exams and return them personally to the distribution centres (KNEC /GEN/EA/FA/SI/CIR 001 Dated 22/09/2016).

There were also the use of CCTV cameras at the exam marking centres which were all within a radius of 50 kms within Nairobi for ease of monitoring. The exams were also released in a record time (KCPE 01.12.2016 & KCSE 30.12.2016 away from the traditional 28th Dec for KCPE and Mid Feb for KCSE) as a security measure to avoid cartels accessing and tampering with the exams. The outcome of these drastic measures saw Kenyans breathe a sigh of hope ([http://www.knec.ac.ke/](http://www.knec.ac.ke/)). For instance in KCSE, the A plain grades were only 141 in 2016 as compared to 2685 in 2015 (KNEC, 2016) (See Appendix 2). However, the E grades increased from 5,350 in the year 2015 to 33, 399 in 2016.
Control systems in examination are not self-administering, they must be periodically tested and policed by the government of Kenya. Security controls are safeguards to avoid, detect, counteract, or minimize to physical property, information, computer systems, or other assets (www.businessdictionary.com/definition/control.html). They can be classified as preventive, detective and corrective controls. According to Fagbemi (2001), different types of examination irregularities have been reported across literature. General forms such as sneaking unauthorized materials, writing on clothes and body parts, copying from each other during examinations, replacements of answer sheets and fraudulent modification of examination marks (Jacob & Lar, 2001). Other reported forms include impersonation, prior leakage of examination questions to students and even colluding with the examination officials such as the supervisors and invigilators. Examination controls are prudent measures of safeguarding quality of examination. The examination controls were practiced well in both in primary and secondary school examinations in year 2016 where no examination irregularities were reported unlike in earlier years.

2.0 IDENTIFICATION OF THE PROBLEM

Incidents of examination cheating in Kenya in the recent past have been of great concern to not only the government but the public as a whole. The cheating in both KCPE and KCSE has been so rampant in the recent past that Kenyan exams were becoming a subject of ridicule both in the region and abroad. Despite government efforts to curb the malpractice, nobody was willing to take up responsibility for the state of affairs and there has been blame game from those involved in the exercise.

It appeared as if it was a lost case until last year (2016) when the concerted effort of the Education Cabinet secretary with other stakeholders ensured a credible national examination. Having managed to offer and deliver credible examinations which were desired by the majority of Kenyans and non-Kenyans, the next step was coming up with strategies of sustaining the gains already made. This will ensure that learners get what they deserve and the country regains its international reputation. A credible examination is impossible without embedding Security controls at every stage of its system. Further, it is important to establish what can be done to eliminate this vice in order to restore the integrity of examinations in Kenya’s education sector. Little has been done in enhancing security control system in sustaining gains made in addressing KCPE and KCSE Examinations irregularities in Kenya. This paper aims at filling this gap.

3.0 SITUATIONAL ANALYSIS AND STATEMENT OF THE POSITION

During the 2015 KCPE and KCSE examinations, KNEC appeared to have lost its entire security mandate. The rampant, almost unstoppable, public examination leakages precipitated cabinet reshuffles within the Government. In 2016 the strategic leadership of the MOE was assumed by a more proactive and insightful Cabinet Secretary (CS). After a brief situational analysis of the examination irregularities, the moribund procedures and processes in the administration of the public examinations were drastically changed. The entire KNEC leadership was overhauled. The new CS instituted concrete security measures, especially in the examinations’ safe-custody and
marking centers. The custody of the examinations was shifted from the various police-manned armories to novel security-proof containers manned by the senior Sub-County education officers and commissioners. Each of the two officers possessed differentiated container padlocks and keys. Therefore the two had to be present and also cooperate during the opening and the closing of the container. This proved to be an excellent and innovative security measure which must be sustained if not further improved.

Considering the gains that have been made and the efforts that have been put to realize these gains it is imperative that these gained must be sustained. Many changes have been put in place to improve the quality of school exams in Kenya, but more importantly are the Ministry of Education 2016 Rules which included; giving high responsibility to head teachers to supervise the examinations and to be in schools throughout the examination period. Further, there was vetting of supervisors and invigilators afresh. To ensure non-interference during the examination period, social activities like holding prayers for the candidates and visiting of schools by strangers and relatives were all banned during third term. There was also banning of use of electronic devices by candidates while in the examination centres (KNEC/TD/SE/KCSE/TT/16/005; KNEC/TD/SE/KCPE/TT/16/006). These measures were easy to implement and did not require a lot of funds but only commitment of all players. They were sustainable and could be modified from time to time depending on the situations available. To this end, the paper recommends the following:

1. The media should ensure accurate and timely examination coverage and professional reporting of any examination issues.
2. Sensitization of stakeholders by Kenya National Examination Council (KNEC) by expanding its mandate and include the training of students, teachers and school administrators on attitude change and on ownership of the program by all stakeholders but not by a section of the society.
3. The Ministry of Information, Communications and Technology should consider improving their intelligence system on all communications by anyone involved in the administration of exams.
4. Curriculum reforms to emphasize the merging of summative and formative evaluation in the ration of 70:30.
5. Examination system audit: The ministry should implement the vulnerability test to detect created-error check, in which an error is deliberately planted in the system to see if it is detecting and reporting, undercover investigators, such as hired exam supervisors who check on the honesty of examination custodians and setters, also play a role in monitoring the operation of control systems.
6. Parents need to take it upon themselves to ensure that their children are not only getting the best tutoring but are also studying hard for any upcoming examinations, if possible they can also assist to teach their children if they have the required skill set. This would help to boost the confidence of the children and also make examination malpractice less attractive.
7. The government through the Teachers’ Service Commission (TSC) should ensure that every school has the right number of qualified teachers. The commission should ensure
that all those who have the responsibility of training students in schools are qualified and certified to do the job up to the required standard. The government also has the responsibility of ensuring that the welfare of these teachers is properly catered for.

8. More use technology in all exams - centralized system to access all stations.

9. The Ministry should implement numerous advance security equipment such as: sensor devices that report unauthorized removal of items; human capital identification and access-control systems that directly identify unique personal characteristics such as voice quality and hand geometry; surveillance devices that can scan offices and stores at night; and devices that permit surveillance at considerable distances, making entry to the premises unnecessary.

10. The Ministry of Education (MOE) should ensure level playground for all players. This should be done by ensuring that all schools have almost the same equipment’s or facilities, human and non-human resources and that the measures that have been used in ensuring credible exams at the national level are also implements at the schools level.

11. Institutionalizing of multi-sectoral approach in examination management. A legal frame needs to be established.

4.0 IMPLICATION OF THE POSITION AND SUSTAINABILITY MEASURES

Positive changes have been observed in the education sector in Kenya since the new cabinet secretary instituted measures to curb cheating in national examination and synergy has been felt within the state. The Ministry of Education, ministry of Interior and Coordination of National Government and the Ministry of Information, Communications and Technology should continue collaborating to ensure that the gains already made are improved and sustained.

1. Investment on ICT is critical. This will assist in prevention, detection correction and even provide evidence during prosecution if need be.

2. A legal framework will bind all the stakeholders and ensure that we have credible examinations now and in the years to come.

3. There is need to instill positive values in pupils and students that will help them grow up into self-disciplined, self-reliant and integrated citizens (KNEC/EA/EM/KCPE/KCSE/EE/2016)

4. Research and development needs to be carried for continuous improvement since we live in a dynamic world.

5. Political goodwill is prerequisite for support of any examination policies and programmes.

6. An independent audit system needs to be established and embedded into the examination process.

5.0 CONCLUSIONS

Examination is both security and also a reputation concern of any nation. School and national examination should always be credible. Gains already made must be safeguarded. To this end
every stakeholder has a role to play. Security control system should be continuity monitored and improved.

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# APPENDIX 1: POSITION MATRIX

| Situation analysis | Statement of the position | Challenges of the specific situation | Suggested courses of action | Mitigation strategies |
|--------------------|---------------------------|--------------------------------------|-----------------------------|-----------------------|
| 1 Media has been insensitive to some examination issues | Accurate timely and professional coverage of any examination issues. | No direct control | Sensitizations of the media | • Press conferences  
• Work shops |
| 2 Some stakeholders are ignorant of their rightful roles. | Sensitization of stakeholders. | No direct control | Embrace independence and professionalism | • Training and development  
• Strong internal control systems |
| 3 Over emphasize on summative evaluation | Curriculum reforms to emphasize on Continuous Assessment Tests | Resistance to change by some stakeholders | Train on change management | • Research and development |
| 4 Laxity in examination system | Independent examination system audit | Weak control systems | Continuous and timely audit of examination system | • Strong internal and external controls  
• Continuous improvement of the system |
| 5 Skewed distribution of resources | Fair distribution of human and other resources in the education sector. | Lack of political goodwill | Equitable distribution of resources | Provision of resources by both the county and the national governments. |
| 6 Parents responsibility | Parents to sensitize their children on positive values. | Too busy career parents | Responsible parenting | Train parents on responsible parenting |
APPENDIX 2: OVERALL NATIONAL GRADE SUMMARY

### TABLE 8: OVERALL NATIONAL GRADE SUMMARY FOR 2016

| GENDER | A   | A-  | B+  | B  | B-  | C+  | C  | C-  | D+  | D  | D-  | E   |
|--------|-----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|
| FEMALE | 58  | 2,685 | 6,581 | 10,204 | 13,649 | 17,238 | 22,960 | 30,979 | 41,632 | 57,487 | 77,718 | 18,077 |
| MALE   | 83  | 1,060 | 4,394 | 7,012 | 10,096 | 14,969 | 21,832 | 30,047 | 39,319 | 54,548 | 72,211 | 15,322 |
| ALL    | 141 | 4,645 | 10,975 | 17,216 | 23,745 | 32,207 | 44,792 | 61,026 | 80,951 | 112,135 | 149,929 | 33,399 |
| CUM %AGE | 0.02 | 0.83 | 2.73 | 5.71 | 9.83 | 15.41 | 23.17 | 33.74 | 47.76 | 67.19 | 93.16 | 98.95 |
| CUM TOTAL | 141 | 4,786 | 15,761 | 32,977 | 56,722 | 88,929 | 133,721 | 194,747 | 275,698 | 387,833 | 537,762 | 571,151 |
| % AGE | 0.02 | 0.80 | 1.90 | 2.98 | 4.11 | 5.58 | 7.76 | 10.57 | 14.02 | 19.43 | 25.97 | 5.79 |

### TABLE 9: OVERALL NATIONAL GRADE SUMMARY FOR 2015

| GENDER | A   | A-  | B+  | B  | B-  | C+  | C  | C-  | D+  | D  | D-  | E   |
|--------|-----|-----|-----|----|-----|-----|----|-----|-----|----|-----|-----|
| MALE   | 2024 | 7952 | 13517 | 19826 | 25312 | 29556 | 33437 | 37482 | 40181 | 40442 | 25531 | 3127 |
| FEMALE | 661  | 4117 | 8410 | 13534 | 19269 | 25214 | 31476 | 36633 | 39796 | 39153 | 23217 | 2223 |
| ALL    | 2685 | 12069 | 21927 | 33460 | 44581 | 54770 | 64913 | 74115 | 79157 | 79555 | 48658 | 5350 |
| CUM %AGE | 0.51 | 2.61 | 6.96 | 13.34 | 21.82 | 32.23 | 44.58 | 58.67 | 73.73 | 88.86 | 96.11 | 99.13 |
| CUM TOTAL | 2685 | 14754 | 36681 | 70141 | 114722 | 169492 | 234405 | 308520 | 387677 | 467232 | 515850 | 521240 |
| % AGE | 0.51 | 2.30 | 4.17 | 6.36 | 8.48 | 10.42 | 12.35 | 14.10 | 15.05 | 15.13 | 9.25 | 1.02 |