



STUDENTS' PERSPECTIVES ON EXAMINATION CHEATING IN BASIC EDUCATION IN KENYA

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Abstract:

This study attempted to unveil students' perspectives on examination cheating in terms of its causes, methods, consequences, and innovative approaches of combating this symptom of moral decay in Basic education in Kenya. The target population was 838 university freshmen joining in first semester of 2018/2019 academic year in a selected faith-based University in Kenya. The sample was 272 students who were registered for Introduction to Sociology and Introduction to Psychology courses, either of which is mandatory to all except Education students. This study was guided by Kohlberg's theory of moral development and Ajzen's theory of planned behavior. Descriptive survey research design was used. Questionnaires comprising both closed and open-ended questions were administered. Data was analyzed by the use of descriptive statistics. Findings revealed lack of preparedness (43.4%) and an excessive emphasis on grades (25.4%) as the main causes of cheating; collusion between examination officials, school administration and police officers (50.4%), leakage of examination questions for profit (18.8%), and copying from another's exam script (11.7%) as the most common ways of cheating; while cancellation of exam results, fines, imprisonment, and interdiction (61.8%) were considered the worst consequences of cheating. Strategies for combating examination cheating were: students should be better prepared for examinations; more effective invigilation and supervision; and the installation of CCTV cameras in examination halls.

Keywords: examination cheating, students' perspectives, basic education, Kenya

1. Introduction

"The greatest want of the world is the want of men - men who will not be bought or sold, men who in their inmost souls are true and honest, men who do not fear to call sin by its right name,

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men whose conscience is as true to duty as the needle to the pole, men who will stand for the right though the heavens fall" (White, 1903, p. 57). Definitely the kind of moral character described in this quotation is the result of both positive perspectives and self-discipline. It is saying 'no' to examination cheating, which remains a great challenge globally in the education sector in the twenty-first century. According to Taylor (2014), preventing and detecting academic dishonesty has always been a challenge, but the internet and computers have made it even more difficult. Examination cheating occurs throughout the world in increasingly sophisticated ways at all levels of education, and Kenya is no exception.

2. Statement of the Problem

Adow, Alio, and Thinguri (2015) are categorical that examination cheating tampers with exam scores to the extent that National examination results cannot be meaningfully interpretable, and thus usable for accountability to the public or decision making in selection and placement processes. Unfortunately, certification is questioned. Bwana (2016, Dec. 30) reported the then Chief Executive Officer of Kenya National Examination Council (KNEC), Prof. Magoha, as saying that high scores in some schools in past years were suspect because of examination cheating.

According to section 10 of the Kenya National Examinations Council (KNEC) Act No. 29 of 2012; KNEC is mandated to: (i) Set and maintain examination standards; and (ii) Conduct public academic, technical and other national examinations within Kenya at basic and tertiary levels, among other functions. In order for KNEC to effectively perform its stipulated functions, it has powers to withhold or cancel the results of candidates involved in examination irregularities or malpractices.

In view of the stipulated oversight management functions of KNEC by the Republic of Kenya on the one hand, against the reported incidences of examination cheating on the other hand, the researcher recognizes the need to redeem and salvage the dwindling integrity and dignity of certification, examination process, and administration in Basic education in Kenya. This research embarked on investigating perspectives of students on examination cheating in Basic education in Kenya in terms of its causes, methods, consequences, and possible strategies/measures of combating this deviant behavior and symptom of moral decline in the twenty-first century.

2. Research Questions

To address the above mentioned problem, this study sought to answer the following five questions:

- 1) What are the main causes for examination cheating in Basic education in Kenya?
- 2) What are the common ways in which students cheat in examinations in Basic Education in Kenya?
- 3) What are the consequences of examination cheating in Basic Education in Kenya?

- 4) What strategies should be put in place to combat examination cheating in Basic education in Kenya?

2.1 Significance of the Study

The findings of this study will benefit all stakeholders in education and the general public by creating awareness and attempting to change people's behavior from cheating in examinations.

2.2 Justification of the Study

Ruto, Kipkoech, and Rambaei (2011) studied student factors influencing cheating in undergraduate examinations in universities in Kenya. Nyamwange, Ondima and Onderi (2013) did a study which sought for factors influencing examination cheating among secondary school students in Kenya. Muchai (2014) similarly investigated factors that contribute to cheating in examinations in Technical Institutions in Kenya. Adow, Alio, and Thinguri (2015) did an assessment of the management of KCSE Examination and its influence on irregularities among students in Kenya. Equally, Owenga, Aloka, and Raburu (2018) studied the relationship between selected personal determinants and examination cheating among Kenyan secondary school students.

However, little has been done to investigate students' perspectives on examination cheating in Basic Education in Kenya in an attempt to develop innovative approaches to combat it. It is against this background that the researcher contends that there was need to fill the gap by conducting and documenting this study, which sought to investigate perspectives of students on examination cheating in Basic education in Kenya as a contribution to the body of knowledge and for use in the field of academia and practice.

2.3 Theoretical Framework

This study was informed and guided by Lawrence Kohlberg's (1958) theory of Moral Development which stemmed from Jean Piaget's Theory of Moral Reasoning. The theory states that morality starts from the early childhood years and can be affected by several factors. Morality can be developed either negatively or positively, depending on how an individual accomplishes the tasks assigned him/her during each stage of moral development across his lifespan. In this study, it is clear that an individual's morality influences their choice to cheat or not to cheat in examinations.

This study was further guided by Ajzen's (1991) theory of Planned Behavior, which is about the link between beliefs and behavior. The theory states that expectations such as motivation, performance, and behavioral reactions are not always spontaneous but are planned and that performance of a behavior is a joint function of intentions and perceived behavioral control. In this study, actions of students such as writing answers on parts of their body and carrying unauthorized materials into the examination room are planned ahead of time in an attempt to cheat in examinations in Basic education in Kenya.

3. Research Design

This study used descriptive survey research design which is valuable for assessing students' perspectives on examination cheating.

3.1 Population and Sampling Techniques

Purposive sampling technique was used to sample one faith-based university in Kenya because it holds academic honesty, personal integrity, and moral values in very high esteem. The population was 838 freshmen joining in the first semester of 2018/2019 academic year because they had just graduated from Basic education and had not yet fully adjusted into higher education. This study used purposive sampling to select all University freshmen joining the university in first semester of 2018/2019 academic year who were registered for the Courses Introduction to Sociology and Introduction to Psychology because they had the information which would benefit this study. It was established that all freshmen, except Bachelor of Education (B.Ed.) students must register for either of the courses during their first academic year.

Table 1: Population and Sample Size

Category	Target population	Sample size	Sample (%)
University freshmen	838	272	33%

Neuman (2011) suggests that for descriptive studies, a minimum of 30% of the target population is adequate. This study used 33% of the target population (see Table 1).

3.2 Research Instruments

This study employed the use of a self-constructed questionnaire for collecting data from all respondents. The questionnaire had both closed and open-ended questions on the perspectives of university freshmen on examination cheating in Basic education in Kenya in terms of: causes, methods and consequences of examination cheating, and possible strategies to be employed in combating cheating in examinations. Two hundred and seventy two questionnaires were distributed and all were returned to the researcher. Hence, this study realized a 100% response rate.

3.3 Data Gathering Procedures

This study sought Research Ethics clearance and approval, National Commission for Science Technology and Innovation (NACOSTI) Research permit and authorization, approval from the County Commissioner, approval from the County Director of Education, approval from the faith-based University, and signed consent of respondents.

3.4 Ethical Considerations

Respondents were assured of confidentiality in handling information given and that there were no sensitive questions that could harm them psychologically. Data was reported honestly.

3.5 Research Findings

Section A: Demographic Profile of Respondents

Question 1: What is your gender?

Figure 1 shows that 187 (69%) respondents were males while 83 (31%) were females in this study.

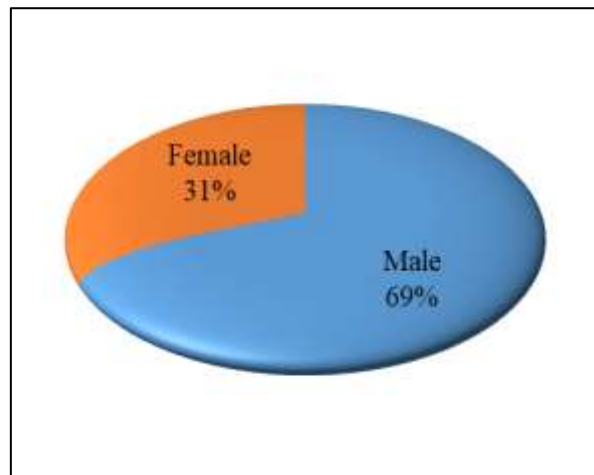


Figure 1: Gender description

Question 2: Have you ever cheated in a test or examination?

Figure 2 shows that 96 (36%) respondents accepted, while 174 (64%) denied that they had ever cheated in a test or an examination. Two did not respond to this question.



Figure 2: Ever cheated in a test or an examination

Section B

Question one: What are the main causes for examination cheating in Basic education in Kenya?

Figure 3 shows the main causes of examination cheating in Basic Education in Kenya according to the 272 respondents in this study. Ranked highest were: lack of preparedness for examinations (118=43.4%); an excessive emphasis on grades (69=25.4%); straight 'A's lead to successful careers (32=11.8%); and pressure from parents, schools and peers (28=10.3%).

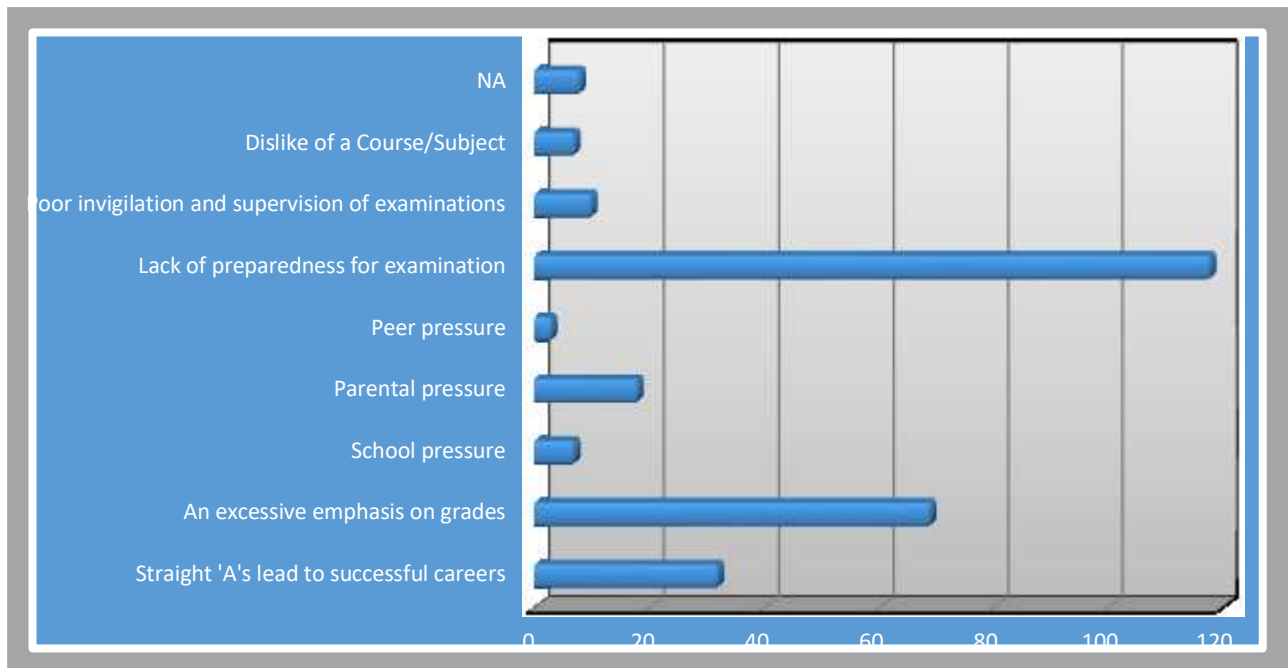


Figure 3: Main causes for cheating in Basic Education in Kenya

Question two: What are the most common ways of cheating in examinations in Basic Education in Kenya?

Table 1: Common ways of Examination cheating in Basic Education in Kenya

Common ways	F	Percent %	Cumulative %
N/A	11	4.0	4.0
Use of mobile phones	19	7.0	11.0
Use of smart watches/smart calculators	2	.7	11.7
Writing information on pieces of paper	2	.7	12.4
Copying from another's test/exam	32	11.7	24.1
Writing short answers on the side of their fingers/on their body	18	6.6	30.7
Leakage of examination questions for profit	51	18.8	49.6
Collusion between examination officials, school administrators, and police officers	137	50.4	100.0
Total	272	100.0	

Table 1 above shows the most common ways of Examination cheating in Basic Education in Kenya. Ranked highest were: collusion between examination officials, school administrators, and police officers (137=50.4%); leakage of examination questions for profit (51=18.8%); copying from another's test/exam (27=9.9%); use of mobile phones (19=7%); and writing short answers on the sides of their fingers/on their body (18=6.6%).

Question three: What is the worst consequence of examination cheating in Basic Education in Kenya?

Table 2: Worst consequences of examination cheating in Basic Education in Kenya

Worst Consequence	F	Percent %	Cumulative %
N/A	9	3.3	3.3
Fines, Imprisonment and Interdiction	49	18.0	21.3
Exam results cancelled	119	43.8	65.1
Exam results withheld	5	1.8	66.9
Arrests and arraignment in the Court of law	10	3.7	70.6
Suspension/Expulsion from school	38	14.0	84.6
Negative effect on a country's education/effect on economy	42	15.4	100
Total	272	100.0	

Table 2 shows the worst consequences of Examination cheating in Basic Education in Kenya. Ranked highest were: exam results cancelled (119=43.8%); fines, imprisonment and interdiction (49=18%); negative effect on a country's education/effect on economy (42=15.4%); and suspension/expulsion from school (38=14%).

Question four: Suggest innovative approaches which should be put in place so as to combat examination cheating in Basic Education in Kenya.

Table 3 shows innovative approaches to be put in place so as to combat Examination cheating as suggested by 244 respondents in this study. The highest ranked strategies were: Students should be adequately prepared for examinations (59=24.2%); ensure effective invigilation and supervision (40=16.4%); install CCTV cameras in exam halls (39=16%); and take stern disciplinary measures against offenders (18=7.4%).

Table 3: Innovative approaches to be put in place so as to combat examination cheating

Responses	f	%
Students should be adequately prepared for examinations	59	24.2
Ensure effective invigilation and supervision	40	16.4
Install CCTV cameras in exam halls	39	16
Take stern disciplinary measures against offenders	18	7.4
Lay less emphasis on grades	14	5.7
Guide students on the importance of Integrity/honesty/hard work	12	4.9
Ensure students have no phones in examination rooms	11	4.5
Teachers and parents should not put undue pressure on the students	11	4.5
The Kenya National Examination Council should ensure exam safety/results credibility	11	4.5
Counsel/advise students on the dangers of cheating	9	3.8
Change teaching strategies	8	3.3
Exam scheduled to be done at a particular time should be uniform all over the country	3	1.2
Provide optional questions for students to choose from	2	0.8
Students to take only subjects that they are equipped with	2	0.8
Lower grading/standard marks to university	2	0.8
Encourage students to follow their talent not only education	1	0.4
Teach less topics	1	0.4
Introduce other careers that do not need high grades	1	0.4
Total	244	100

4. Discussion

4.1 Demographics of Respondents

While 96(36%) respondents accepted, 174(64%) denied that they had ever cheated in a test or an examination in Basic Education. The percentage of those who accepted having cheated is an indication of a big challenge the education sector in Kenya is faced with today. There is need for innovative approaches to combat examination cheating.

4.2 Main Causes of Cheating

A. Lack of preparedness for examinations

One hundred and eighteen (43.4%) respondents indicated that lack of preparedness for examinations was the main cause of cheating. The urge to cheat in examinations is greatest for those students who are not well prepared. According to Adow, Alio, and Thinguri (2015), lack of preparedness is a major reason for cheating in examinations in Basic education level. Activities such as watching TV and playing mobile phone games are prioritized over reading academic materials and soon exams come and catch up with the unprepared student (Barasa & Sifuna, 2013).

B. Excessive emphasis on grades

Sixty nine (25.4%) respondents rated an excessive emphasis on grades as a main cause of cheating in examinations. The society today lays very much emphasis on grades and those who excel in academics are honored publicly. Speeches are made to the effect that the future of those making good grades is bright and that only the sky is their limit. A study conducted by Muchai (2014) found out that students cheated in examinations so as to obtain higher grades for recognition as being intelligent.

C. Straight 'A's lead to successful careers

Thirty two (11.8%) respondents indicated that straight 'A's lead to successful careers. Kenyan secondary schools currently display the 'Career Wheel' on which subject combinations are connected to careers that are known for high grade requirements. Such careers as Engineering, Medicine, and Law are considered as gateways to gaining wealth and prestige. Taylor (2014) concurs by asserting that the contemporary world lays a lot of emphasis on gaining wealth and prestige, which is a major motivation for obtaining outstanding grades. Some students end up cheating in examinations so as to qualify for successful careers.

D. Pressure from parents, schools, and peers

Twenty eight (10.3%) respondents indicated that students cheat in examinations because of pressure from parents, schools, and peers. Some parents push students in to cheating in examinations by either providing the cheat materials or by putting so much pressure on their children for good grades that less academically endowed students end up cheating so as to measure up with the high parental expectations. Anderman (2018, February 15) reports that students in high schools in the US cheated in examinations because they experienced immense pressure from parents to get good grades in order to obtain admission to competitive universities.

Schools add to the already existing pressure by making grade policies that focus on competition for the highest score rather than ensuring that students have mastery of the subject matter/content of the course (Taylor, 2014). Nyamwange, Ondima, and Onderi (2013) found out that secondary school students experienced excessive pressure to produce good grades. Teachers also facilitate cheating by leaking examination content to students. Yet others will camouflage it in the guise of revision of syllabus content. Owenga, Aloka, and Raburu (2018) revealed that teachers were involved in examination cheating practices in secondary schools in Kenya. Adow, Alio, and Thinguri (2015) also found out that peer pressure caused some students to cheat in examinations.

4.3 Common Ways of Cheating

A. Collusion between examination officials, school administrators, and police officers

One hundred and thirty seven (50.4%) respondents rated collusion between examination officials, school administrators, and police officers as a common way of cheating in Basic Education in Kenya. It is apparent that some custodians of examinations, who are looked up to for leadership, also double up as facilitators of examination cheating. Respondents were aware that some examination officials, school administrators and police officers would collude and assist them in their quest for success in examinations. Nyamwange, Ondima, and Onderi (2013) also provide evidence of collusion between examination officers, school administrators and police in Kisii County Kenya.

B. Leakage of examination questions for profit

Fifty one (18.8%) respondents indicated that the Examination officials and school administrators, who collude in leaking examination cheat materials, commit this crime for the sake of making profit in the form of money. According to Folson and Awuah (2014), leakage of examination questions for profit gain from West African Examination Council (WAEC) employees is a key way of examination cheating in Ghana.

C. Copying from another's test/exam

Thirty two (11.7%) respondents rated copying from another's test/exam as a common way of cheating in examinations in Basic Education in Kenya. Students copy from one another's examination answer booklets with or without the classmates' knowledge and consent. A classmate may allow the offending student access to their answer sheet during the examination so as to be seen as a 'good guy' who helps his/her comrade. This is characteristic of Stage 3 of Kohlberg's Moral Development theory referred to as the Good Boy-Nice Girl Orientation. There are also occasions when an offending student would elongate their neck or position their head strategically in an attempt to copy from an unknowing classmate. Maheka's (2015) study revealed that giraffing was one of the methods of cheating in examinations in Zambia. Quintos (2017) also found out that students copy from one another in examinations in the Philippines.

D. Use of mobile phones

Nineteen (7%) respondents rated use of mobile phones as a common way of cheating in examinations in Basic Education in Kenya. Mobile phones are increasingly used to send leaked examinations and answers via such social media as WhatsApp, Twitter, and Facebook. Anderman (2018, February 15) observes that high school students in the United States of America cheat in examinations by using Smartphones and sharing answers via Facebook and text messaging on their mobile phones.

E. Writing short answers on the sides of their fingers/on their body

Eighteen (6.6%) respondents indicated that writing short answers on the sides of their fingers or on other body parts was one of the common ways of cheating in examinations. Students write short answers in between their fingers, on their arms, and other body parts before going to write exams. Ajzen's (1991) theory of planned behavior comes in to play as the belief that it is alright to cheat and actual behavior link up. Shon (2006) explains that students cheat by writing short answers on the sides of their fingers. Ali (2016, July 22) equally reveals that students write notes on parts of their body as they go into the exam halls in the United Kingdom.

4.4 Worst Consequences of Examination Cheating

A. Exam results cancelled

One hundred and nineteen (43.8%) respondents in this study expressed that the worst consequence of cheating in examinations was having their results cancelled. This implies that all efforts at school over the years are lost. Adow, Alio, and Thinguri (2015) identified cancellation of examination results for a particular center as a major consequence of examination cheating in Basic education in Kenya.

B. Fines, imprisonment and interdiction

Forty nine (18%) respondents considered fines, imprisonment, and interdiction as a worst consequence of examination cheating. Fines would involve a colossal amount of money as a punishment for cheating in examinations. Imprisonment would interrupt and delay in time the learners' schooling. Interdiction occurs in the case of employees who are caught in examination malpractices. When found guilty, interdiction would lead to loss of employment. Adow, Alio, and Thinguri (2015) revealed that thirty teachers from Mandera County, who invigilated and supervised Kenya Certificate Secondary Education examinations, received letters of interdiction from Teachers Service Commission for colluding with students to cheat.

C. Negative effect on a country's education system/economy

Forty two (15.4%) respondents considered this consequence their worst. Students were aware that cheating in examinations leads to results that are not credible, which makes a country's education system questionable. Consequently, those who cheated in examinations, obtained good grades, and secured good jobs, may prove incompetent in their workplaces, thereby affecting a country's economy negatively. Ndlichako (2009) affirms that one of the indicators of a good system of education is the quality of people produced in terms of competences needed for social, political and economic development of the nation.

D. Suspension/Expulsion from School

Thirty eight (14%) respondents rated suspension/expulsion from school as the worst consequence of engaging in examination malpractices. This repercussion may mark the end of a learner's academic journey. Taylor (2014) asserts that repeat offenders of examination cheating should receive automatic suspension/expulsion from the institution.

4.5 Innovative Approaches which Should Be Put in Place so as to Combat Examination Cheating

A. Students should be adequately prepared for examinations

Fifty nine respondents (24.2%) suggested adequate preparation for examinations as key in combating examination cheating in Basic Education in Kenya. Some ways in which students may be prepared adequately include, but are not limited to, attending classes regularly, adhering to self-developed personal study schedules, full coverage of the syllabus, and providing adequate educational facilities and teaching-learning resources. Desalegn and Berhan (2014) found out that students who did not attend most lectures were more prone to cheating than those who attended because they were ill-prepared. Ngungu (2011) revealed that lack of time for preparations was a critical cause for cheating in examinations. Teachers ought to allow students time for personal study and mastery of content. Okaron (2016) alludes to the fact that adequate educational facilities enhance examination preparedness. There should be equity in access to educational facilities and provision of teaching-learning resources across board. This should help against scarcity in some schools, hence the struggle to be at par with the advantaged schools for good examination results through cheating. Muchai (2014) also considers the provision of adequate educational facilities as a major measure in combating examination cheating among students.

B. Ensure effective invigilation and supervision

Forty (16.4%) respondents suggested that invigilation and supervision of examinations should be more effective. A thorough check of students and what they carry in to the examination rooms should be faithfully conducted. Muchai (2014) suggests that invigilation and supervision of examinations should be enhanced so as to combat cheating. Teachers, who more often than not, are the Invigilators and Supervisors in National examinations, should be trained and re-trained in the strict handling of National examinations. The same skills should be put into use during internal examinations. Desalegn and Berhan (2014) similarly suggest that levels of invigilation and supervision of examinations should be increased in attempts to combat cheating. Additionally, Ruto, Kipkoech, and Rambaei (2011) assert that Invigilators and Supervisors should be alert in the examination rooms throughout the exam period as students must not be left unattended.

C. Install CCTV cameras in exam halls

Thirty nine (16%) respondents suggested that schools should install CCTV Cameras as an innovative approach towards combating cheating in examinations in schools in the 21st century. The presence of functional CCTV Cameras in an examination hall gives the

assurance of enhanced security of examination processes. A few schools in Kenya have already installed CCTV Cameras in all of their classrooms, which double up as examination rooms. Ghana Web (2018, February 20), reported that the West African Examination Council (WAEC) was already considering the installation of CCTV cameras at the various examination centers.

D. Take stern disciplinary measures against offenders

Eighteen (7.4%) respondents suggested that stern disciplinary measures should be taken against examination offenders. Some schools in Kenya have come up with such innovative measures as having examination culprits wear reflector jackets bearing the words, "I am an exam cheat". They walk around the school compound wearing the reflector jackets for a given period of time. This not only serves as a punishment to offenders but is also a deterrent to prospective offenders.

5. Conclusions

Based on the findings of this study, the following conclusions were drawn:

- 1) The number of respondents who accepted having cheated in examinations (96=36%) is an indication that the Basic Education sector in Kenya is faced with a big challenge.
- 2) Lack of preparedness, an excessive emphasis on grades, straight 'A's lead to successful careers, and pressure from parents, schools and peers are the main causes of cheating in examinations in Basic Education in Kenya.
- 3) Collusion between examination officials, school administrators, and police officers, leakage of examination questions for profit, copying from another's test/exam, use of mobile phones, and writing short answers on the sides of their fingers/on their body are the most common ways of cheating in examinations in Basic Education in Kenya.
- 4) Cancellation of examination results, fines, imprisonment and interdiction, Negative effect on a country's education/effect on economy, and suspension/expulsion from school are considered the worst consequences of examination cheating in Basic Education in Kenya.
- 5) Students should be adequately prepared for examinations, ensure effective invigilation and supervision, install CCTV cameras in exam halls, and take stern disciplinary measures against offenders so as to combat examination cheating in Basic Education in Kenya.

5.1 Recommendations

The Ministry of Education, Science and Technology should:

- 1) Guide and counsel students on matters of integrity in examinations continuously.
- 2) Ensure that students are adequately prepared for examinations.
- 3) Enhance effective invigilation and supervision practices of examinations.
- 4) Tighten disciplinary measures against examination offenders.

- 5) Install functional CCTV Cameras in classrooms and examination halls, which should be serviced and monitored regularly.

References

- Adow, I. M., Alio, A. A., & Thinguri, R. (2015). An assessment of the management of KCSE examination and its influence on irregularities among students: A case of secondary schools in Mandera County, Kenya. *Journal of Education and Practice*, 2 (28). Retrieved from <https://files.eric.ed.gov/fulltext/EJ1081189.pdf>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50, 179-211 Retrieved from www.citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.832.5105&rep=rep1&type=pdf
- Ali, A. (2016, July 22). Exam cheating: A third of students admit to doing so this year alone, as survey reveals the most unusual methods used. *Independent*. Retrieved from <https://www.independent.co.uk/student/student-life/studies/examcheating>
- Anderman, E. M. (2018, February 15). Why students at prestigious high schools still cheat on exams. *The Conversation*. Retrieved from <https://theconversation.com/why-students-at-prestigious-high-schools-still-cheat-on-exams>
- Barasa, P. W. & Sifuna, A. (2013). *Value based education and positive discipline in schools*. Limuru, Kenya: Franciscan Kolbe Press.
- Bwana, J. (2016, Dec 30). CS Exams agency boss sneer at past top grades. *The Standard* pp. 3.
- Desalegn, A. A. & Berhan, A. (2014). Cheating on examinations and its predictors among undergraduate students at Hawassa University College of medicine and health science, Hawassa, Ethiopia. *Journal BMC Medical Education* 14 (89). Retrieved from <https://bmcomeduc.biomedcentral.com/articles/10.1186/1472-6920-14-89>
- Folson, D. & Awuah, F. K. (2014). Combating examination malpractices in the basic education certificate examination (BECE) in Ghana. *International Journal of Computer Applications*, 100(7), 12-23. Retrieved from <https://research.ijcaonline.org/volume100/number7/pxc3898113.pdf>
- Ghana Web (2018, February 20). Exam malpractices: Students using smart watches to cheat- WAEC. Retrieved from <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/Exam-malpractices>
- Kohlberg, L. (1958). Theory of moral development. Retrieved from <https://explorable.com/theory-of-moral-development>
- Maheka, G. (2015). Nature and causes of examination malpractices in selected secondary schools in Kitwe district, Zambia. (Unpublished master's dissertation). The University of Zambia. Retrieved from

- www.dspace.unza.zm:8080/xmlui/beatsream/handle/123456789/4202/Main Document.pdf?
- Muchai, J. (2014). *An investigation into factors that contribute to cheating in examinations in technical institutions in Central Province, Kenya* (Unpublished master's thesis). University of South Africa. Retrieved from www.citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.832.5105&rep=rep1&type=pdf
- Ndalichako, J. (2009, March). Evaluation of the conduct of primary school leaving examination (PSLE) in Tanzania mainland. *The National Examination Council of Tanzania (NECTA)*.
- Neuman, L. (2011). *Social research methods: Qualitative and quantitative approaches*. Pearson Retrieved from https://www.researchgate.net/publication/235342123_Social_Research_Methods_Qualitative_and_Quantitative_Approaches
- Ngungu, J. K. (2011). *Factors influencing examination malpractices by students in Kenya certificate of secondary school examinations in Kitui west district, Kenya* (Unpublished master's thesis). University of Nairobi. Retrieved from www.researchkenya.or.ke/api/content/abstract/cheating
- Nyamwange, C., Ondima, P. & Onderi, P. O. (2013). Factors influencing examination cheating among secondary school students: A case of Masaba south district in Kisii County, Kenya. *Elixir Psychology* 56 (2013) 13519-13524. Retrieved from [www.elixirpublishers.com/articles/1363584927_56\(2013\)13519-13524.pdf](http://www.elixirpublishers.com/articles/1363584927_56(2013)13519-13524.pdf)
- Okaron, P. (2016, June 21). Causes of and dealing with exam cheating: Education in Kenya. *Eneza Media*. Retrieved from <http://enezaeducation.com/causes-of-and-dealing-with-exam-cheating/>
- Owenga, J. T. O., Aloka, P. J. O., & Raburu, P. A. (2018). Relationship between selected personal determinants and examination cheating among Kenyan secondary school students. *Academic Journal of Interdisciplinary Studies*, 7 (1), 73-82. Retrieved from <https://content.sciendo.com/view/journals/ajis/7/1/article-p73.xml>
- Quintos, M. A. M. (2017). A study on the prevalence and correlates of academic dishonesty in four undergraduate degree programs. *Asia Pacific Journal of Multidisciplinary Research* 5(1), 135-154. Retrieved from www.apjmr.com/wp-content/uploads/2017/03/APJMR-2017.5.1.2.15.pdf
- Ruto, D. K., Kipkoeh, L. C., & Rambaei, D. K. (2011). Student factors influencing cheating in undergraduate examinations in universities in Kenya. *Problems in Management in the 21st century*, 2, 1-9. Retrieved from www.oaji.net/articles/2014/450-1391946818.pdf
- Shon, P. C. H. (2006). How college students cheat on in-class examinations: Creativity, strain, and techniques of innovation. Retrieved From <https://quod.lib.umich.edu/p/plag/5240451.0001.010/--how-college-students-cheat->
- Taylor, S. M. (2014, February-March). Term papers for hire: How to deter academic dishonesty. *The Journal of Adventist Education*, 34-41.

White, E. G. (1903). *Education*. Mountain View, CA: Pacific Press Publishing Association.

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