

Journal of Education

ISSN Online: 2616-8383



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Peer Reviewed Journals & books

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ISSN NO: 2616-8383

Moderating Effect of University Standards and Guidelines on the Relationship between Administrative Procedure of Setting Examination and Quality of Examinations in Public Universities in Kenya

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***How to cite this article:* Kathula N. D., & Adhiambo J, M. & Mwalw'a S. N. (2019): Moderating Effect of University Standards and Guidelines on the Relationship between Administrative Procedure of Setting Examination and Quality of Examinations in Public Universities in Kenya. *Journal of Education*, Vol 2(2) pp. 15-28.**

Abstract

University examinations play a significant role in evaluating the teaching and learning process. However, there is a widespread perception that the quality of examinations in Universities in Kenya is declining. This study sought to critically examine the influence of university standards and guidelines on the relationship between administrative procedure of setting examination and quality of examinations in public universities in Kenya. It used the mixed method research design specifically the concurrent triangulation research design. It combined phenomenological research design for qualitative data and cross-sectional survey research design for quantitative data. The researcher purposively sampled 5 universities from the 31 public universities in Kenya. The study sampled 242 respondents. Questionnaires, interview guides, interview schedule and document analysis were used to collect data. Quantitative data were analyzed using descriptive statistics and presented in form of frequencies tables, graphs, mean, standard deviations and inferential statistics by conducting a correlation and multiple regression. Qualitative data were analyzed thematically. University standards and guidelines were found to influence the relationship between administrative procedures of setting examinations and quality of examinations. Lecturers were not frequently trained on techniques of setting examinations. The study recommends that university administration should provide funds to train the academic staff on administrative procedures and guidelines of setting examinations according to CUE guidance in order to improve the quality of examinations.

Key words: *University Standards and Guidelines, Administrative Procedure, Public Universities & Kenya.*

1.0 Introduction

1.1 Background of the study

Under the guidelines of the criterion-referenced test philosophy, it is incumbent upon the subject matter experts, to determine the task, content and cognitive skill areas to be tested in each item (Kanjee, Braun, Bettinger & Kremer, 2006; Linda, 2013). Criterion-referenced examinations are usually composed of examination items that are representative of the field of practice and written to measure the knowledge and skills of qualified candidates (Onyechere, 2006; Rivera, 2007; Linda, 2013). In addition, the items are statistically evaluated to ascertain that they measure what they purport to measure, are appropriate for the test.

According to Odia (2011) ethical standards for examinations are being compromised and this again has become a cause for concern among stakeholders in the education sector throughout the whole world. He further argues that lack of ethics caused by unclear policies on examination administration undermine the integrity and credibility of the institutions of Higher Education and also poses the greatest risk to the learner assessment system. Many universities have established internal quality assurance units to coordinate the various activities that comprise quality. Among the plethora of internal quality assurance tools in use are external examiners, self-evaluation and academic audits (Mokamba, 2015). Self-evaluation is at the top in terms of faculty involvement and empowerment in curricular matters as it provides space for internal critique of programmes (Munene, 2013). It also provides opportunities for identification of strength and weaknesses and means of identifying key performance indicators. External examiners undertake the validation of the assessment methods and modes. Universities in Kenya have recognized the need and importance of internal quality assurance in academic programming as a means of ensuring accountability as nearly all universities have established directorates dedicated to quality assurance (Republic of Kenya, 2012; Mathooko, 2013; Kagumba & Gongera, 2013).

The objectives of University Education include developing in students and scholars the ability to think independently, critically and creatively. It also involves advancement and dissemination of knowledge and desirable values. Furthermore, educating and training the high level human capital needed for accelerating development through industrialization of the economy is an important component of University Education. Nurturing the internalization of universal knowledge, including key technological advances with a view to harnessing it for national development are also objectives of University Education (Republic of Kenya, 2008). Through basic and applied research, universities should help solve the problems facing society. The Universities also help to create a society in which both merit, based on diverse talents and equity in development are recognized. Universities ought to nurture entrepreneurial skills in the graduates to enable them to build employment opportunities for themselves and others (Mukhwana, Oure, Too & Some, 2016; CUE, 2016).

This therefore implies that graduates from Universities ought to undergo a fundamental transformation that empowers them to think clearly and independently and solve problems creatively. They should also be able to make sense and use information and embody moral and intellectual values that characterize dignified citizenship. Such graduates would be innovative, enterprising, morally sensitive, and self-directing. Basing on these, this study sought to establish whether the adherence to the administrative procedures of setting examinations contribute towards the achievement of these attributes in students as the examinations are the final stage of curriculum evaluation.

1.2 Problem Statement

Universities in Kenya are at the center of the education-workplace continuum and therefore are supposed to be characterized by high quality and excellence in examinations (CUE, 2014; World Bank, 2011). However, there is a widespread stakeholders concern regarding the quality of examinations especially in public Universities in Kenya (Obwogi, 2011; Eucharia, 2012; Mbirithi, 2013; Munene, 2013). It seems that there is inadequate knowledge on administrative procedures and guidelines on setting University examinations despite well documented policies (Gudo *et al.*, 2011; Akaranga & Ongong, 2013; Bunyi, 2013; Nyangau, 2014; Waithaka, 2015; Mokamba, 2015; Munene, 2016). These studies focused on the role of institutional managers in quality assurance, quest for quality education, institutional response to globalization in Higher Education, and examination malpractices. This leaves a knowledge gap on research on assessing administrative procedures of setting examinations and quality of examinations as it featured in all.

A number of Universities in Kenya have revoked degree and refused to recognize certain diploma certificates awarded to students through fraudulent processes and means, as they comply with tough requirements from the University Education regulator. The Commission for University Education has since approved the revocation as required by law. Masinde Muliro University of Science and Technology, in a public notice, revoked degree certificates it had awarded to 16 students due to fraud and other examination malpractices. It informed CUE of the decision to withdraw or cancel the degree certificates (Inzhener Otmetka, 2017). The certificates were recalled after it emerged that some of the recipients had graduated despite having pending cases, some sat examinations despite not being eligible, while others had forged their certificates by colluding with some staff at the university. Another public University also revoked a number of diploma certificates it had awarded to Members of County Assemblies in 2016.

Universities would produce students with good grades but with poor skills, knowledge and competencies in their subject areas. This has dire effects on their integration in the job market after graduation and the quality of services provided by university graduates (Njeiah, 2012; Munene, 2013; Muthamia, 2015). Academic staff preparedness influences the quality of examination. Academic administrators monitoring, evaluation, feedback and supervision of academic staff activities influence their work altitude and quality of examination (Morris, 2016). This study therefore sought to assess the influence of university standards & guidelines on the relationship between administrative procedure of setting examination and quality of examinations in public universities in Kenya in order to address this problem and seeks to fill the gap as information was scanty.

1.3 Objective of the Study

To examine the influence of university standards and guidelines on the relationship between administrative procedure of setting examination and quality of examinations in public Universities in Kenya.

1.4 Research Hypothesis

Ha: There is significant examine the influence of university standards and guidelines on the relationship between administrative procedure of setting examination and quality of examinations in the public Universities in Kenya.

2.1 Literature Review

2.1.1 Theoretical Review: The Institutional Theory

The institutional theory describes how institutions survive and succeed through congruence between an institution and the expectations from its environment. The institutional view argues that organizations need legitimacy from their stakeholders. Institutions perform well when they are perceived by the larger environment to have a legitimate right to exist. The institutional view believes that institutions adopt structures and processes to please outsiders and these activities come to take on rule-like status in institutions. Draft (2007) adds that institutions consider the processes by which structures, including schemes; rules, norms, and routines, become established as authoritative guidelines for social behavior. Jaffee (2004) concludes that different components of institutional theory explain how these elements are created, diffused, adopted, and adapted over space and time towards achieving improved quality performance. The theory examines the rules, norms and routines that become established as authoritative guidelines for social behavior. However it does not give the guidelines on how they are determined, developed, implemented, monitored and maintained in order to improve quality performance and also remain relevant in a dynamic world. The theory explains that elements have to be created, diffused, adopted, and adapted over space and time.

The theory was relevant for the current study which looked at procedure guidelines policies, implementation and monitoring systems of setting examinations in public universities in Kenya. This is because the institutional culture of each University plays an important role on how academic staff utilize the setting guidelines as documented when undertaking examinations setting, moderation and implementation of feedback as provided for by external moderators and quality assurance analyzed information on examinations. This theory should be utilized by the academic administrators to effectively and purposely play their role of guidance, monitoring, evaluation and feedback provision to academic staff. To know that what is shared as a good researched document by the regulator of education, the Commission for University Education to ensure well laid down broken step by step systematically procedures for setting examination for ease of understanding , requires collaborative participation for all stakeholders to ensure they are used as intended. Whereas if left as standard guidelines and policies for universities, they just become documents on the shelves and academic staff continue to follow the good will of institutional culture within their universities as status quo when setting examinations. This theory was for supporting information ‘what should and what we do’.

2.2 Empirical Review

Quality of examination is important in enabling learning outcome. A study was carried out by Adedoyin (2013), on public examinations and its influence on the Botswana educational system. Using an exploratory survey study and a questionnaire administered to a total number of two hundred (200) Undergraduate Education Students at the University of Botswana and responded by 186. It was analyzed using descriptive statistics and one sample population t-test. The findings of this research study indicated that quality of examination is a measure of educational outcomes thus having both positive and negative influences on students. Stakeholders in education have been concerned about the influence of public examinations on teaching and learning outcomes. The study suggested that quality examination improves quality of education and the overall enhancement of teaching and learning. This current study then sought to confirm from academic

staff and academic administrators how they ensured quality in the setting of examinations and standard guidelines and procedures in use.

In a study by Chaminuka and Ndudzo (2014) on students and staff perceptions on examination malpractice and fraud in higher education in Zimbabwe used the qualitative research methodology. Participants were drawn from four (4) Higher Education institutions. The researcher used a structured questionnaire and group interviews for data generation. The study revealed that examination malpractice and fraud is caused by fear of failure and inadequate preparation for examinations, shortage of learning and teaching resources among other factors. It was observed that the major types of examination malpractice and fraud being perpetuated in Higher Education institutions are possession of 'unauthorised materials' during examinations, copying from each other in the examination rooms. The research further revealed that examination malpractice and fraud leads to lack of confidence in Higher Educational qualifications, results in unqualified graduates, discourages hard work and lowers the standard of Zimbabwean education.

An article by Maheshwari (2011) on malpractices in examinations- The termites destroying the educational setup in higher education institutions in India, argued that lack of quality examination leads to lack of confidence in Higher Educational qualifications, results in unqualified graduates, discourages hard work and lowers the standard of education. Maheshwari recommended that relevant policies and legislation on setting examinations be crafted and enforced. Arguing that, poor paper setting indirectly encourages malpractice in examinations as paper setters are mostly untrained and unaware of modern approaches to assessment and that the examination papers are hardly representative of the entire curriculum. Hence this current study sought to get the preparedness of the academic staff on the administrative procedures and guidelines of setting examination and how they go about setting examination using the guidelines and procedures to ensure examination quality is achieved. This in the case of universities it may imply that quality of examinations may be improved by adhering to policies on examinations set by the relevant authorities like Commission for University Education and individual university councils on how examinations should be set, moderated, printed, stored, invigilated and marked to reduce the chances of any malpractices and fraud that may compromise the quality.

2.3 Conceptual Framework

Conceptual framework is a diagrammatical representation that shows the relationship between dependent and independent variable (Kothari, 2006). The framework helps the reader to see at a glance the proposed relationships between the variables in the study graphically or diagrammatically. The conceptual framework is as shown in Figure 1.

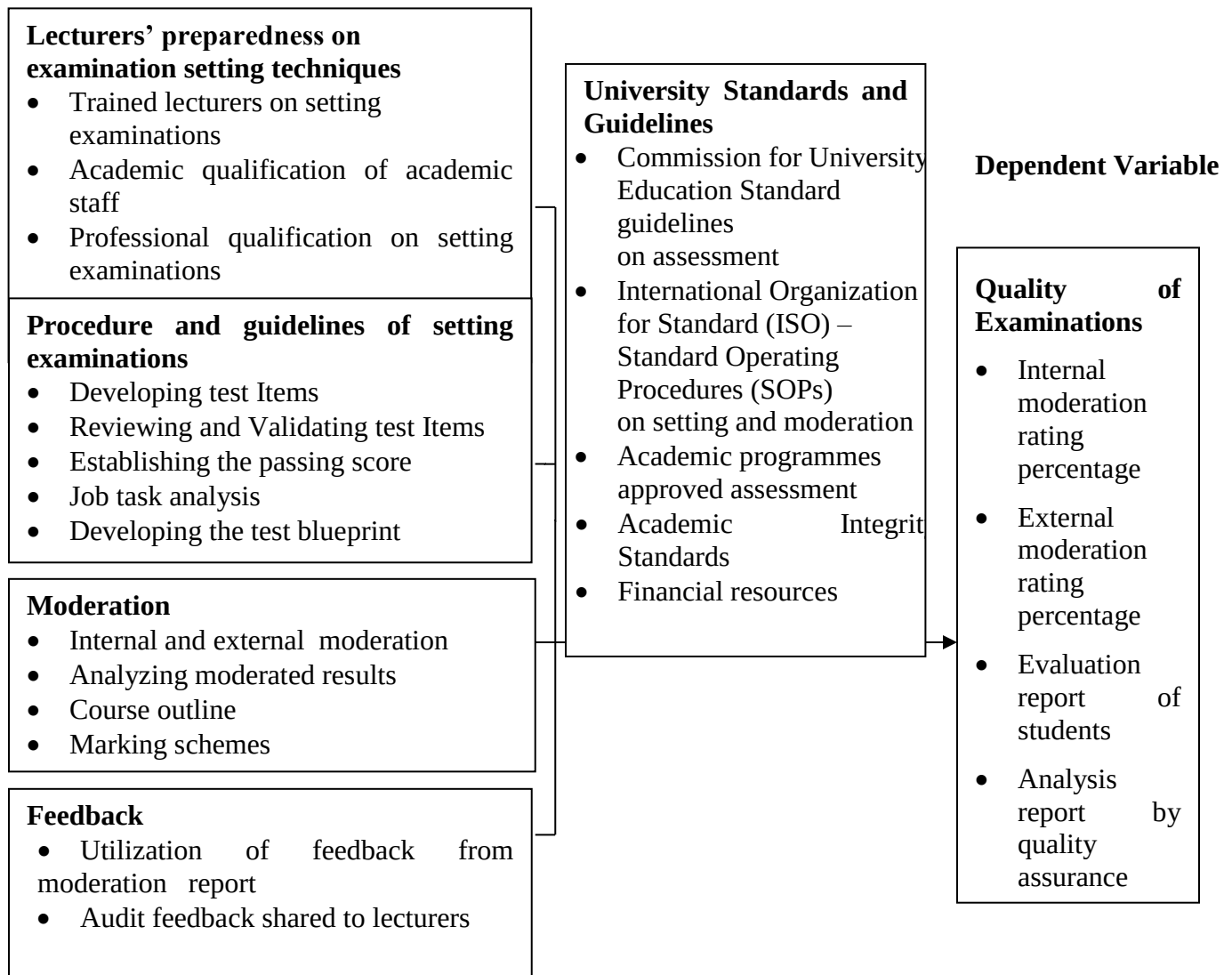


Figure 1: Conceptual Framework

3.0 Research Methodology

This study used mixed methodology specifically the concurrent triangulation research design. The study was conducted within five Public Universities in Kenya namely University of Nairobi, Kenyatta University, Egerton University, Moi University and Masinde Muliro University. The Universities were chosen because they are the oldest Universities in the country and therefore have more information in regard to setting examinations. According to the Commission for University Education report (2018), there are thirty one Public Universities in Kenya (Appendix 10). The total number of the Academic Staff, Deans of Faculties, Deputy Registrar Examination and Administration, Registrar Academic and Students' Affairs and Quality Assurance Officer in These Universities was the target population for the study

Both probability and non-probability sampling techniques were used to select the sample for the study. The researcher purposively sampled 5 universities from the 31 Public Universities in Kenya. The five universities sampled represented 16% of the total Public Universities and this percentage was suitable for the study since it was bigger than the 10% recommended by research experts (Gay, 1992; Mugenda & Mugenda, 2003). The Universities selection was based on them holding charters issued by the Commission for University Education (CUE) in Kenya or are established by different Acts of Parliament.

The Lecturers formed a major subgroup for the study as they are the main evaluators of the curriculum, they set the examinations, moderate, administer, mark and grade examinations. The total number of Academic Staff in the 5 sampled Universities were 4,134 people. The study sampled 207 Academic Staff from the 5 Universities. The Academic Staff population in each University was divided by the aggregate population of Academic Staff in all the Universities and multiplied by the required sample size. For instance, for University of Nairobi the sample of 81 was obtained by dividing the Academic Staff population in the University (1610) over the aggregate Academic Staff population (4134) then multiplying the quotient by the required sample size (207). A similar computation approach was done for Moi University, Egerton University, Kenyatta University and Masinde Muliro University of Science and Technology yielding sample sizes of 37, 25, 48 and 16 respectively.

The researcher purposively sampled the deans of faculties that were involved in the study. The study focused on the faculties of Agriculture and Business and the departments of Agricultural Education and Extension and Business Studies. The researcher purposively sampled the Deans of faculties of Agriculture and Business and the heads of department of the Agricultural Education and Extension and Business Studies in each of the 5 Universities. Therefore the 2 Deans of the relevant faculties from each of the 5 Universities were involved in the study making a total of 10 Deans of Faculties. The study involved also 2 heads of department from each of the 5 Universities making a total of 10 heads of department. This resulted to a total of 20 Deans of Faculties/ Heads of Departments who were involved in the study.

All the five deputy registrars of examination and administration from the respective participating universities were purposively included in the study. They formed part of the administration team and had a direct role in conducting examinations as they are legally in charge of the actual examination process. Registrar Academic and Students' Affairs who had been in the office for at least over one year in the participating Universities were purposively sampled giving a total of five respondents. Registrar Academic and Students' Affairs were very important to the study as they are the administrators who coordinated the academic staff, examination staff, admission staff and student affairs. Internal Quality Assurance Officers from the participating Universities were purposively sampled and included in the study. The Quality Assurance Officers are in charge of ensuring that Universities offer quality education. Overall, the study thus sampled 207 academic staff; purposively selected 20 Deans/Head of Departments; involved all the 5 Examination Administrators or Deputy Registrar Examination and Administration; all the 5 Registrar Academic and Students' Affairs (ASA); and all the 5 Quality Assurance Officers in each of the 5 universities. This gave a grand total of 207 Academic Staff and 35 Academic Administrators thus yielding 242 participants.

The study used questionnaires, interview guides, interview schedule and document analysis guides to collect data. The interview guide was chosen so that individual participants could speak in their own words for the purpose of recording. The research instruments were given to four experts to ascertain the validity of the instruments. Piloting was a prior study before the actual collection of

data aimed at making assessment of the level of validity and reliability of the intended tools of data collection. Both quantitative and qualitative data analysis procedures were used to analyze data. After the data collection, the researcher ensured that the instruments were double-checked for completeness. The quantitative data were subjected to descriptive statistics. The t-test statistic and Analysis of Variance (ANOVA) statistic were used for comparison specifically to find whether there was significant mean difference between and among the variables. Multivariate regression analysis was used to assess the linkages between several variables.

4.0 Results and Discussion of Findings

The study sought to investigate the moderating effect of university standards and guidelines on the relationship between administrative procedure of setting examination and quality of examinations. The university standard and guidelines included Commission for University Education (CUE) guidelines and the International Organization for Standardization ISO and Standard Operating procedures (SOPs) on setting and moderation of examinations. The results are presented in Table 1.

Table 1: University Standards and Guidelines, Administrative Procedures and Quality of Examinations (n=167)

	N	C		R		S		RA		NA		Mean	SD
		f	%	f	%	f	%	f	%	f	%		
University ISO and QMS-Standard Operation Procedures (ISO-QMS-SOPs) regulations are taken in to consideration during the moderation of examinations question paper for every semester	167	9	5.4	37	22.2	44	26.3	36	21.6	41	24.6	3.377	1.225
Commission of university education guidelines and regulations are taken into consideration during examination question paper moderation process every semester	167	9	5.4	35	21.0	53	31.7	35	21.0	35	21.0	3.311	1.177
CUE audit feedback is shared to the lecturers on time for improvement once done	167	29	17.4	36	21.6	33	19.8	47	28.1	22	13.2	3.0180	1.315
Overall mean score	167		9.4		21.6		25.9		23.5		19.6	3.235	1.239

NB: C=Constantly; R=Regularly; S=Sporadically; RA=Rarely, NA=Not at all

The academic staff agreed to a moderate extent ($M=3.377$, $SD=1.225$) that University ISO and QMS- Standard Operation Procedures (ISO-QMS-SOPs) regulations are taken in to consideration during the moderation of examinations question paper for every semester. It was also established that Commission of University Education (CUE) guidelines and regulations are taken into consideration during examination question paper moderation process every semester ($M=3.311$, $SD=1.177$). This signified that the procedure guideline reference documents were referred to during moderation. These were internal university procedure documents as done for ISO certification and the regulator standard procedure and guideline documents as given by the Commission for University Education. There was moderate response regarding CUE audit feedback being shared to the lecturers on time for improvement once done ($Mean=3.018$, $SD=1.3147$). This moderate response was due to the fact that most universities do not have external moderation of the question paper every semester but during the second semester, which limited feedback utilization by the academic staff for improvement. According to Commission for University Education in Kenya (2014), the policy on the assessment procedures that all universities should adhere to in setting examinations and administration include clear guidelines on setting, moderating, administration, marking and processing examinations results. The policy further indicates that the university administration should put in place a mechanism for receiving feedback from stakeholders on the programmes and undertake periodic self-assessment to address the requirements of stakeholders. Furthermore, mechanisms for evaluating the expected learning outcomes including the process, inputs, quality assurance, achievements, graduates, stakeholders, and analysis of strengths and weaknesses should also be put in place.

The study further determined if there was any significant influence of university standards guideline on the relationship between administrative procedure of setting examination and quality of examinations using p value and the t-test statistic. The following hypothesis was tested;

H_0 : There is no significant influence of university standards guideline on the relationship between administrative procedure of setting examination and quality of examinations in the public universities in Kenya.

The t-test statistic and P values assess whether the means of two groups are statistically different from each other. In this case it compares the statistical mean differences between university standards guideline and quality of examinations. The decision rule was that reject H_0 when p-value is lower than the critical level of significance (0.05) and t statistic value is greater than 1.96. Fail to reject the H_0 when the p value is greater than 0.05 and statistic value is less than 1.96. The results are indicated on Table 2.

Table 2: One-Sample Statistics for University Standards Guideline

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
University Standards Guideline	167	3.2355	1.08742	.08415

One-Sample Test

	T	Df	P value	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
University Standards Guideline	38.451	166	.000	3.23553	3.0694	3.4017

The results given (df=166, $p < 0.05$)

The calculated p value was 0.000 which was less than the critical p-value 0.05. Therefore, the null hypothesis is rejected. Therefore on examining the influence of university standards guideline on the relationship between administrative procedure of setting examination and quality of examinations, it can be concluded that university standard guidelines influences the relationship between administrative procedure of setting examination and quality of examinations. That university standard and guidelines are very importance for administrative procedure of setting examination and the quality of examination.

5.0 Conclusion

The study concluded that University standards and guidelines influence the relationship between administrative procedures of setting examinations and quality of examinations. The University ISO and QMS- Standard Operation Procedures (ISO-QMS-SOPs) regulations are not fully taken in to consideration during the setting and moderation of examinations question paper. There is moderate sharing of CUE audit feedback with the lecturers on time.

6.0 Recommendations

On adherence to administrative procedures and guidelines of setting examinations, the government through the Ministry of Education should provide resources and ensure that appropriate experts are available to support the development of the right procedures and guidelines of setting examinations and the experts are used to train on the same in all universities as scheduled short courses. The identified experts should have content developed on for example, course and programme design, teaching skills and competencies required in assessment of student learning, using technology in teaching and assessment development among others.

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