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ABSTRACT

This study sought to examine the influence of lecturers' preparedness on examination setting techniques and quality of examinations in public Universities in Kenya. The study also examined the influence of university standards and guidelines on the relationship between lecturers' preparedness on setting examinations and quality of examinations. The study used the concurrent triangulation research design of mixed method which combines phenomenological research design for qualitative data and cross-sectional survey research design for quantitative data. Both probability and non-probability sampling techniques were used to select the sample for the study. A total of 242 respondents were involved in the study. Qualitative data were organized into themes to make meaningful conclusions of the study. The study found a statistically significant relationship between lecturers' preparedness and quality of examinations. It was found out that the lecturers were not frequently trained on techniques of setting examinations. The trainings were neither properly scheduled, planned nor budgeted for. The study therefore recommended that the Ministry of Education should provide finances to train the university's academic staff on the importance of lecturers' preparedness on examinations setting and its effect on quality of examinations. This study focused only on public universities. Therefore there should be a study done on the same covering the private universities.

Keywords: Lecturers' Preparedness, Quality of Examination, Public Universities

INTRODUCTION

Universities are engines for economic growth committed to building a skilled workforce. They teach, conduct research to advance knowledge and promote creativity and innovation. This is of great significance particularly, in the dynamic world where education is expected to equip learners with the basic skills and competencies that will enable them to continually solve problems of the society at large (Ogbogu, 2014). The society looks up to universities to take lead in generating the required knowledge, supply capable human capital, appropriate technology, and innovation needed to meet this goal by producing a cadre of highly qualified manpower equipped with requisite skills (Obwogi, 2011; Republic of Kenya, 2012; Mbirithi, 2013; Mwalw'a, 2013).

According to Gebremedhin and Syoum (2015), the university examinations are conducted in many countries of the world and have been considered to play a significant role in determining the way the lecturers teach and how the students learn. The major purpose of examinations is to support the teaching and learning process, but some forms of examinations can clearly impede deep learning. If the examination stresses understanding and critical approaches to learning, it is likely that students would adopt deep approaches to learning (Gudo, Oanda & Olel, 2011). Hargreaves (2011), Aguirre and De Cadiz (2011) have emphasized that credible assessment through examination and accreditation of curricula would usher in programs for students that would enable them to acquire specialized skills suited to the demands of various industries. Further De Cadiz (2012) argues that a credible assessment could be a benchmark in formulating policies towards uplifting the level of education in developing countries. This is because university administration and lecturers will monitor the impact of their teaching and assessment on students' job market requirements.

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 population, minimize the amount of test error, and are coherent in style and format.

According to Adedoyin (2013) in Botswana, lecturers are likely to use past examination papers to revise with their students instead of focusing on syllabus content. Quality content coverage is therefore compromised and the emphasis is on how to pass the examinations. Furthermore, Nolen, Haladyna, and Haas (2002) reported that many lecturers engaged in inappropriate or unethical testing procedures because of pressure to produce high test scores. They are frustrated by external and internal pressures to teach according to the test and are angry that the examinations were used to evaluate lecturers' effectiveness.

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.

In Kenya, universities have examination policies and standard operation procedures and guidelines on examination setting, moderation, administration and related activities (Kibabii University, 2014; University of Nairobi, 2013; Maseno, 2008; Cheserek, 2011; Eucharia, 2012). While this is in order, implementation, monitoring, evaluation and utilization of feedback has not been done effectively. This therefore created the need to study how these policies and guidelines especially related to setting examinations are being implemented, supervised and monitored in these universities.

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).

Statement of the Problem

Universities in Kenya are at the centre of the education-workplace continuum and therefore are supposed to be characterized by high quality and excellence in examinations through reevaluating their mode of assessment (CUE, 2014; World Bank, 2011). However there is a widespread perception of a decline in the quality of university examinations in Kenya due to inappropriate test setting procedures (Sifuna, 2010; Muoki, 2011; Kimotho, 2011; Obwogi, 2011; Mwalw'a, 2013; Mbirithi, 2013; Munene, 2013, Mathooko, 2013; Mokamba, 2015). It seems that there is inadequate knowledge on administrative procedures and guidelines on setting examinations (Gudo et al., 2011; Nyangau, 2014; Waithaka, 2015; Munene, 2016). These studies focused on the role of institutional managers in quality assurance and institutional response to globalization in higher education. This leaves a knowledge gap on research on assessing the lecturers' preparedness in setting examinations and quality of examinations.

Most university lecturers may be academically highly qualified with years of teaching experience but few have had proper training in setting examinations and contemporary approaches to assessment (Muthamia, 2015). 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) had observed that the ugly incidence of examination practices accounts for existence of several qualifying examinations in Kenya such as post university matriculation, aptitude tests, and job placement aptitude tests among others to authenticate candidate's certificates. He argues that Kenya graduates cannot even write

comprehensive letters which partly blames on setting and administration of examinations in public universities in Kenya. This disharmony in lecturers' preparedness and quality of examinations informed the cause for this inquiry. Academic staff preparedness influences the quality of examination. This study therefore sought to critically assess the lecturers' preparedness on examinations setting and quality of examinations in public universities in Kenya.

Objective of the Study

- To determine the influence of lecturers' preparedness on examination setting techniques and quality of examinations in public universities in Kenya.
- To examine the influence of university standards guideline on the relationship between administrative procedure of setting examination and quality of examinations

Hypotheses

- H_{a1} : There is significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations in the public universities in Kenya.

H_{01} : There is no significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations in the public universities in Kenya.

- H_{a2} : There is 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.

H_{02} : 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.

Theoretical Framework

This study was anchored on Item Response Theory (IRT) of setting examinations as proposed by Hambleton, Swaminathan and Rogers (1991). This theory is often used to overcome psychometric problems commonly associated with traditional methods that are currently used in standardized setting examinations and psychological measurement. The suggested theory places items and examinees on the same common metric. This allows for the spread of the items, the location, redundancy, and gapping and provides better insight into the measurement capabilities of the test. The strengths of Item Response theory are numerous. First, it begins with the proposition that an examinee's response to a certain item is determined by an unobservable mental attribute of that examinee. That attribute is referred to as trait or ability. Traits are not directly observed and therefore they are referred to as latent traits or latent abilities. Secondly, IRT attempts to model the relationship between an examinee's ability and probability of the examinee correctly responding to a certain test item (Reise & Waller 2009). This relationship is modeled by a function called item characteristic function or item response function. Item Response Theory (IRT) or latent trait models provide a statistically-rich class of tools for analysis of educational examinations and psychological scale data.

Despite having many advantages over Classical Test Theory (CTT), IRT models are not perfect. They have some technical and practical limitations (Hambleton & Jones, 1993). Item Response Theory models are usually complex and the process of estimating their parameters are often practically difficult. Model fit can be problematic too. It is still not clear how the problems of model fit can be solved, especially problems relating to the dimensionality of the model. In practice, the technical demands for IRT models are more complicated than for CTT models. The more parameters the model employs, the more precise

information they yield which increases the technical burden. Another drawback of IRT is that IRT models require large sample size for estimating parameters (Rivera, 2007). For multidimensional IRT, the sample size should be larger than 2000.

Despite the said weaknesses of this theory, this study decided to use it since the study was being done on the highest level of the education system in Kenya. Technical and practical limitation should not be a challenge as professionals in this level are highly qualified and experienced. The theory was required at this level of education system to ensure that products in terms of university graduates it sends to the field of work and community has what it takes to deliver to the society. The departments to be studied have large student numbers and are key to the economic and societal well-being of this country.

Item Response Theory (IRT) has a wide range of applications. In test development, the final set of items is usually identified through a process known as item analysis in which statistical properties of examinees' response to an individual item are examined. In almost all test settings, examinees take the same test. Typically, these examinees possess different levels of ability measured by the test. Research has indicated that a test would maximally measure the ability of each examinee if test items are presented to each examinee so the probability of answering each item correctly is half way between 0 value and 1.0 (Embretson & Reise, 2000). This cannot be done by using a single test for all examinees. Therefore, there is a need for adaptive testing (Hambleton, 1989). This is a practice which is only applicable in the universities as they are left out of the standardized test developed for basic levels of education.

Conceptual Framework

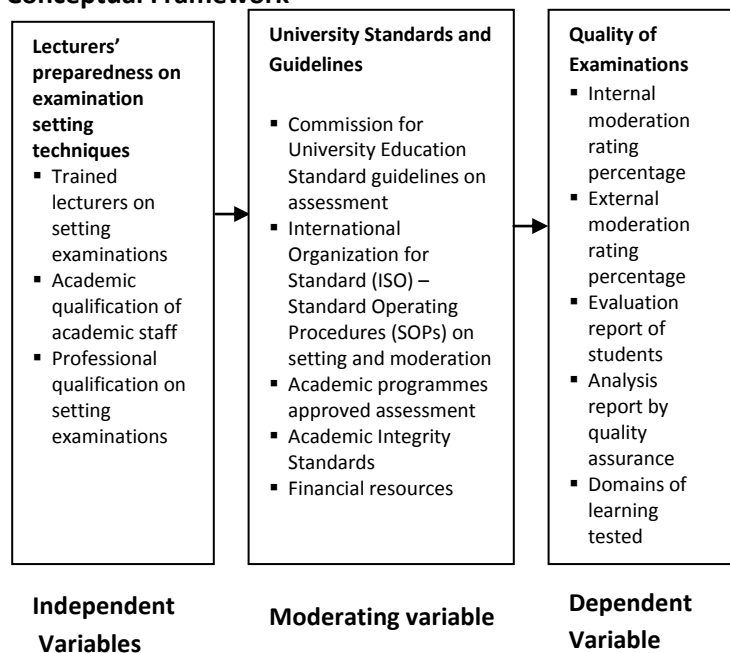


Figure 1: Conceptual Framework

REVIEW OF RELATED LITERATURE

The Continuous Professional Development model

The continuous professional development model provides five education-related activities used to evaluate the degree of professionalism. These include educational theory, application and the refinement of validated pedagogy, instructional and managerial autonomy, lecturers' development and professional ethics. This model was used by Obwogi (2011) in a study on factors that affect the quality of teaching staff in universities in Kenya. The study used a quantitative research approach using survey design and data was collected using a questionnaire. Respondents were university teaching staff from 5 public and 3 private universities. A sample size of 120 was obtained using stratified random sampling method. Data analysis was done through descriptive statistics and factor analysis. The study found out that human resource management practices were a major factor that contributes to the quality of teaching staff at universities in Kenya yet it remains the least addressed. The human resource management

practices such as recruitment and selection, training, promotion, career development, performance, motivation and compensation requires more focus.

Arguing improving or enhancing the professional competencies of academic staff of the university is of crucial importance. As a way of keeping staff current in their respective fields, the most forward thinking institutions must incorporate staff development into their budget and performance expectations. To strengthen quality of teaching staff at universities in Kenya and across the region, the university management must be committed to staff development.

The theory was relevant for the current study which looked at administrative procedures of setting examinations and quality of examination as it is a requirement that academic staff and academic administrators in universities are professionally trained on the administrative procedures for setting examination and on how the procedure evaluate both curriculum programme and curriculum implemented for harmony and inclusiveness. The procedure when followed well should also provide information for review and updating of the curriculum programmes as well as guiding on the instructional implementation methods of delivery for better student understanding. Administrative procedures of setting examinations when adhered to they help in identification of gaps for justification of continuous professional development to be planned and budgeted for to ensure updating on knowledge, skills, ethics and competencies in designing, setting and administration of quality examinations.

Empirical Studies

Lecturers' Preparedness on Examination Setting Techniques

Most lecturers do not attend formal professional development training in designing assessments but depend on their experience in carrying out the exercise of setting examinations in universities. A study by Goos and Hughes (2010) used an online

survey method to collect data from course coordinators in the faculty of an Australian university. The study revealed that most of the academic staff in universities relies on tacit knowledge obtained through the experience of assessing rather than knowledge derived from training in designing assessments. However most of the course coordinators highlighted the importance of capacity building of the academic staff on assessment. The study focused on general professional development of staff in only one faculty of the university in Australia, used only the course coordinators and applied the survey design in collecting data. The current study expanded the scope and locality by using two faculties in five universities in Kenya. It also used both the academic administrators and the academic staff and collected data using both qualitative and quantitative methods. It specifically focused on professional development related to setting or designing assessments or examinations in the public universities.

A similar study by Othman and Dahari (2011) on the utility of professional development of academic staff in the university was carried out in four universities in Malaysia. The study involved 100 respondents who had undergone a professional development course, graduated and had implemented the strategies they had learnt from the course. A structured self-administered questionnaire was used to elicit responses and insights regarding the impact of professional development among academic staff. Respondents were asked to rate their opinion according to a 5-point Likert-type scale, (5 = strongly agree, and 1 = strongly disagree). The statistical tests performed, included an analysis of frequencies, mean score, analysis of variance and factors analysis.

The study found that the participants had positive perception of the course. They were happy for the opportunities offered by their respective universities to improve their knowledge and skills. They believed that the professional development is useful in developing their academic potential. However, the

study also found that the impact of the professional development of the actual practice of the academic staff was minimal (Othman & Dahari 2011). The study used four universities, teaching staff who had graduated and mainly used quantitative methods to collect data. This current study expanded the scope to five universities and used a different locality. It also used both the qualitative and quantitative methods of collecting data and focused only on professional development related to setting examinations at the university level.

Quality of Examinations Standards Guidelines and Procedures

Quality of examination is important in enabling learning outcome. A study 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 on practices of assessing graduate students' learning outcomes in selected Ethiopian higher education institutions, Chalchisa (2014) employed a survey method in collecting data from 131 instructors, which were selected with stratified sampling. Questionnaire and interview were used as

instruments for collecting data. The results showed that there were no significant differences among instructors from different field of study and frequent use of assessment results for improving learning. Also no significant mean differences were observed in teaching experiences and quality of examinations. However, significant differences were observed among the mean scores of the above three variables by academic rank with better use of assessment strategies, different types of test items by lecturers than professors and associate professors for quality of examinations. The study further suggested that professors and associate professors should pay attention to the assessment of students learning through quality of examination development. The current study then checked to establish the academic qualification and professional qualification numbers and frequency of training on techniques of setting examination to see relationship with the adherence to administrative procedures for setting examination and quality of examinations.

METHODOLOGY

This study used mixed method research design specifically the concurrent triangulation mixed method design. In this design, both quantitative and qualitative data are collected at the same time and then analyzed concurrently and conclusions are drawn. 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 were oldest universities in the country and therefore have more information in regard to setting examinations. The researcher purposively sampled 5 universities from the 22 public universities in Kenya. The total number of academic staff in the 5 sampled universities was 4,134 people. The lecturers formed a major subgroup for the study as they were the main evaluators of the curriculum. They set the examinations, moderate, administer them, mark and grade them. The

researcher also purposively sampled the deans of faculties that were involved in the study. All the five deputy registrar examination and administration from the respective participating universities were purposively included in the study. 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. Internal Quality assurance officers from the participating universities were purposively sampled and included in the study.

The study used questionnaires, interview guides and document analysis guides to collect data. The study exploited more than one method of data collection in order to enhance generation of deeper and broader insights on the area of study and also enable confirmation and validation of the collected data (Patton, 1990, 2002; Yin, 2003). The questionnaire for lecturers consisted of both closed and open ended

questions. Both quantitative and qualitative data analysis procedures were used to analyze data.

FINDINGS

Lecturers' Preparedness on Examination Setting Techniques

The study determined the frequency of lecturers training on setting examination, at what level is training on setting examination carried out within the university and the scheduling and budgeting of training on setting and administration of examinations. More statements were also raised to ascertain the training frequency planning, quality level of training, satisfaction level of training, training meeting professional needs and mode of training.

The study sought the opinion of the respondents regarding the number of time academic staff underwent training in their universities.

Table 1: Frequency of academic staff training on techniques of setting examinations (n=167)

Frequency	Frequency	Percentage
More than 5 times per year	7	4.2
2-4 times per year	22	13.2
Once per year	62	37.1
0 times per year	76	45.5
Total	167	100.0

The study revealed that majority (45.5%) of academic staff, did not undergo trainings annually. This showed that training did not take place or was not taken seriously. This might be detrimental to the quality of examinations since lecturer need to equip themselves with the best examination practices that are geared towards improving quality of examinations. The study further indicated that only 37.1% of academic staff had undergone trainings on examination setting techniques once a year. This was a low percentage considering the importance of examinations and more so the quality which requires regular trainings to lecturers. The study also found that 13.2% of academic staff were trained 2-4 times per year on examination setting techniques. This was very low to

imply also that during semester/trimester orientation if it does take place very few mention is done on how to set examination. The least 4.2% of academic staff underwent trainings 5 times a year.

From the findings it was established that most of the universities did not train their lecturers frequently on examination setting techniques. This implied that most lecturers did not possess the required knowledge and skills for setting quality examinations which in turn compromise the objectives of the assessment process. The findings were argued in line with Bluestone, Johnson, Fullerton, Alderman and BonTempo (2013) on effective in-service training design and delivery arguing that repetitive training interventions, rather than single training

interventions, are superior for learning outcomes. The study thus suggested that settings similar to the frequency of training lecturers improve skill acquisition, competencies and performance. Frequent training especially to new lecturers or new concepts arising could equally be more effective than once or no trainings and are also more cost efficient if effective techniques of training are used. Effective techniques like departmental trainings can lead to

improvements in knowledge and skill outcomes in the specific area of specialization.

The study sought to determine at what level among university, school, faculty and department was training on techniques of setting and administration of examinations carried out. This was important to determine the seriousness of how training was arranged and carried out.

Table 2: Level of training on techniques of setting and administration of examinations according to academic staff (n=167)

Level of training	Frequency	Percentage
University Level	51	30.5
School	57	34.1
Faculty	30	18.0
Departmental	29	17.4
Total	167	100.0

The study established that majority (34.1%) of those academic staff, who indicated having undergone training did their training at the respective schools in their universities; this could be attributed to the ability of each school to identify the training needs and planning and budgeting for it at the beginning of budget year as required for cost effectiveness. The study further indicated 30.5% of academic staff had trained at the university level. Some of academic staff 18% indicated that their trainings were undertaken at the faculty and the rest of academic staffs 17.4 % were trained on techniques of setting and administration of examination at the departmental level. It was therefore important to note that universities did not train at departmental level which was important in taking in to consideration the needs assessed in the department as far as lecturers training in setting quality examinations. This may be due to low level of seriousness and budget allocation needed for training to take place. It was therefore interpreted that universities training needs assessment were not localized along departmental level which might had

an adverse effect on how lecturers in the department should be trained in line with the needs of a particular course and the challenges encountered in the respective departments. It was at the department where head of departments coordinates operational activities.

The findings showed that training if any is carried mostly at the school or university level. First it is hard to monitor that each lecturer has attended such training due to information flow hinges and also some lecturer may not take it important and thus were likely to abscond as opposed to when it is arranged at the departmental level where each is known for attendance record. This was because at the university level the training needs of most lecturers may not be taken care of. It is therefore important to note that universities surveyed are not keen on training lecturers on the specific needs.

From the document guides at the deans' office they revealed the training undertaken as given in table 3.

Table 3: Deans/heads of department documentation of training (n=12)

Type of trainings	Frequency	Percentage
IT	7	58.33
Examination setting and Marking	5	41.67
Teaching excellence procedures	9	75.00
Anti- plagiarism software	12	100.00
Research management	8	66.67
E-learning activities	7	58.33
Pedagogical and educational skills	4	33.33

The results indicate that there were various trainings that the universities had undertaken according to the deans/heads of departments. These included IT, examination setting and marking, teaching excellence procedures, anti- plagiarism software, research management, e-learning activities and pedagogical and educational skills. For instance training on anti-plagiarism software registered highest agreement (100%) across all the universities with all the deans/heads of departments providing evidence. This was an indication that all academic staffs were prepared to undertake research and research supervision work seriously to avoid students submitting plagiarized assignment or projects. Further teaching excellence procedures and research management associated trainings were also carried out across the universities as represented by 75.0% and 66.67% of the deans/head of departments respectively.

It was also noted that examination setting and marking which was the focus of this study had low level of evidence documents across the universities

(41.67%) and the least trainings evidence documents being for pedagogical and educational skills (33.33%). This was deduced to mean that although trainings were carried out in the universities, very few were focused on improving the quality of examinations. Pedagogical and educational skills were training for good curriculum implementation or instructional implementation which set the base for curriculum evaluation and quality examinations setting. There was no single evidence document on the psychometric skills training across all the universities surveyed. This lack of commitment concurs with previous studies (Daniel, 2014; Teklebrham & Samuel, 2015). The study determined the frequency of scheduling and budgeting for training on setting and administration of examinations in the university. This was to evaluate the willingness and importance the university had given to improving quality of examinations in the universities. Scheduling and budgeting of lecturer training creates culture for continuous training which results to improved quality of examinations.

Table 4: Frequency distribution of training on setting and administration of examinations being budgeted for (n=167)

Times in a year	Frequency	Percentage
Once per year	86	51.5
Twice a year	11	6.6
Three times a year	9	5.4
For all new teaching staff	16	9.6
Not at all	45	26.9
Total	167	100.0

The study revealed that most the institutions scheduled and budgeted for training once a year as represented by a higher percentage (51.5%). Additionally some of the academic staff 9.6% indicated that trainings were done only for the new teaching staff. However some institution 26.9% neither budgeted for nor scheduled for training of their academic staff on setting and administration of examinations. This implied that the universities did not take seriously the importance of training the teaching staff on the techniques of setting and administration of examinations. It is important for universities to budget for frequent training of lecturers because the right staff training program can increase employee engagement, retention, and productivity, decrease the need for supervision, improve the quality of examinations and reduce examination malpractices (Riechi, 2010; Bunyi, 2013).

This was deduced to mean that although trainings were carried out in the surveyed universities, very few were focused on improving the quality of examinations. Pedagogical and educational skills were training for good curriculum implementation or instructional implementation which set the base for curriculum evaluation and quality examinations

setting. There was no single mention on the psychometric skills training across all the universities surveyed. Goos and Hughes (2010) indicated that once approved, the training budget will need careful management to ensure that costs stay on track.

The study further sought to determine the respondent's views on certain statements relating to training of lecturers on setting and administration of examinations. The teaching skills of a lecturer could be measured based on the lecturer's abilities around comprehension and transformation of knowledge concepts to be imparted to learners (Ganyaupfu, 2013). Moreover, training may evaluate the lecturer's ability to distinguish the knowledge base of his or her teaching at the intersection of content and pedagogy in the respective teacher's capacity to transform content knowledge into practices that are pedagogically influential and adaptive to numerous students' abilities and backgrounds. Basing on this argument the academic staff were to respond on how these statements manifested in the universities and measured using a likert scale (1=strongly disagree, to 5=strongly agree).

Table 5: Lecturers Preparedness on setting and administration of examinations (n=167)

Preparedness on setting and administration of examinations	N	SD %	D %	N %	A %	SA %	M	SD
Training on setting and administration of examination is offered in our university as planned activity	167	33.5	22.2	12.6	21.0	10.8	2.533	1.413
The Level of training on setting and administration of examination being provided in my university is satisfactory	167	28.1	24.6	19.8	21.0	6.6	2.533	1.279
Setting and administration of examination training provided in	167	26.9	24.6	16.8	23.4	8.4	2.617	1.325

my university is of high quality

My individual professional needs on setting and administration of examinations are met by university training activities 167 28.1 25.7 12.6 23.4 10.2 2.617 1.374

My individual professional needs on setting and administration of examinations are met by coaching and mentorship 167 22.8 19.8 19.8 29.3 8.4 2.808 1.308

My individual professional needs on setting and administration of examinations are met by continuous staff development in my university 167 25.1 21.0 15.0 25.1 13.8 2.814 1.413

Overall Mean Score 167 27.42 22.98 16.1 23.87 9.7 2.65 1.352

NB: SD=Strongly Disagree; D=Disagree; N=Neutral; A=Agree; SA=Strongly Agree

The overall mean score of the academic staff response to statements concerning the level of lecturers' preparedness in examination setting techniques was 2.65 and standard deviation of 1.352. This depicted low level of lecturers training across the surveyed public universities. The study established that most of the respondents strongly disagreed 33.5%, disagreed 22.2% and neutral 12.6% when requested to give their opinion pertaining training on

setting and administration of examination as offered in their university as a planned activity. This was supported by a computed mean of 2.533 and a standard deviation of 1.413.

From the document guides at the registrar academic and students' affairs they revealed that documents for planned training to be offered were available as given in table 6.

Table 6: Planned training according to registrar academic and students' affairs documentation

	Frequency	Percentage
CUE guidelines	5	100
Departmental guidelines	3	60
Deans office guidelines	5	100
On how		
Training Manuals	5	100
University calendar	1	20
Arranged Seminars	5	100
Training experts	4	80

The results indicated that all the universities had CUE guidelines (100%) planned training, deans' office guidelines (100%), however only (60%) of registrar academic and students' affairs indicated had planned

for and used departmental guidelines. On how they did it, arranged seminars (100%) and training manuals (100%). (80%) indicated use of training experts and only (20%) indicated used university calendar as given

for planning. It was also established that most of the academic staff strongly disagreed (28.1%), disagreed (24.6%) and neutral (19.8%) on the level of training on setting and administration of examination being provided in their universities as satisfactory as indicated by a computed mean of 2.533 and a standard deviation of 1.279. The academic staffs further strongly disagreed (26.9%), disagreed (24.6%) and neutral (16.8%) that the training on setting and administration of examination provided in their university is of high quality as shown by a computed mean of 2.617 and a standard deviation of 1.325. The training meeting individual professional needs on setting and administration of examinations strongly disagreed (28.1%), disagreed (25.7%) and neutral (12.6%) as shown by a mean of 2.617 and a standard deviation of 1.374.

A few registrar academic and students' affairs indicated use of departmental guidelines, use of training experts and the university calendar. They indicated having a centre of teaching excellence that trains lecturers on a wide range of teaching- learners' areas including examinations setting and administration. Training by CUE plans made within departments, schools and sometimes at the university level, trained on Supervision, publications, grants writing, administrative process, Pedagogy and andragogy.

Table 7: Training on administrative procedures and guidelines on setting examinations according to Quality assurance officers' documentation

	Frequency	Percentage
Offering training	4	80
In-service	2	40
Workshop	5	100
Checking lecturers qualifications	4	80
Exchange program in the department	3	60
Reviewing examination policies	3	60
Evaluating quality of examinations	3	60

These findings were in concurrence with previous study by Birhanu (2013) which reported that lecturers lack skills of assessing students' performance. Teachers cannot provide experience and activities that guide students' progress towards understanding of ideas if they themselves do not know what these ideas are (Obwogi, 2011), neither can they provide experiences that challenge students understanding if they themselves share the same misunderstanding (Olatunbosun, 2009).

The study however established that the academic staff agreed (29.3%) and strongly agreed (8.4%) that individual professional needs on setting and administration of examinations were moderately met by coaching and mentorship as supported by a mean of 2.808 and standard deviation of 1.308. Additionally it was revealed that individual professional needs on setting and administration of examinations were moderately met by continuous staff development in their universities agreed (25.1%) and strongly agreed (13.8%), this was represented by a mean of 2.814 and standard deviation of 1.413.

The study further interviewed Quality assurance officers on how they ensured that academic staffs were trained on administrative procedures and guidelines on setting examinations in their respective universities. The results as a planned activity are indicated on Table 7.

The results showed that quality assurance officers were in agreement across all the surveyed universities that they facilitated planning for workshops (100%) as a way of ensuring academic staffs were trained on administrative procedures and guidelines on setting examinations. Furthermore quality assurance officers agreed that they did so through offering trainings and checking lectures qualifications (80%) as a planned activity. Other ways included planning for exchange program in the department (60%), planning for reviewing examination policies (60%) and evaluating quality of examinations (60%). However planning for in service received low agreement as a way of ensuring academic staffs are trained on administrative procedures and guidelines on setting examinations.

All the above statements from the academic staff were however strongly to the negative response on summation. The findings were in line with a study by Goos and Hughes (2010) who concluded that most lecturers do not attend formal professional development training in designing assessments but depend on their experience in carrying out the exercise of setting examinations in universities.

The study further concluded that most of the academic staff in universities relied on tacit knowledge obtained through the experience of assessing rather than knowledge derived from training in designing assessments. In the same study most of the course coordinators highlighted the importance of capacity building of the academic staff on assessment. This therefore showed that most of the public universities had not put in place the measures that ensure proper training of academic staff on how to set examinations and thus they depend on their knowledge and experience and possibly past papers to set examinations.

The study therefore suggested that developing an effective lecturers training program especially on improving examination quality was vital to the long-

term success of the university. The study further indicated that strict following of administrative procedures and guidelines in setting examinations may be able to enable university administration seek areas of training that need to be promoted, and suggest ways of doing it, but ultimately the responsibility rests mainly with the administration since it's their responsibility to carry out training that would inculcate the kind of professionalism in promoting educational outcome and the overall quality of examinations.

This study revealed that the surveyed universities and by extension all public universities in Kenya should be characterized by its ability to foster training: exchange of knowledge, interactive networking and interaction of lecturers and students while taking into account the quality of examinations that measure learning objectives. In this context therefore quality assurance should exist alongside and support the ideal of lecturers training in order to achieve quality as far as examinations are concerned.

The study then determined if there was any significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations by using the t-test statistic. The following hypotheses were tested;

H_{a1} : There is significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations in the public universities in Kenya.

H_{01} : There is no significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations in the public universities in Kenya.

The t-test assesses whether the means of two groups are statistically different from each other. The decision rule was that reject H_0 if the test statistic is extreme, either larger than an upper critical value or smaller than a lower critical value at 95% confidence level. The results are indicated on Table 8.

Table 8: One-Sample Statistics for level of lecturers' preparedness

	N	Mean	Std. Deviation	Std. Error Mean
Level of lecturers preparedness	167	2.6537	1.14056	.08826

One-Sample Test				95% Confidence Interval of the Difference		
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Level of lecturers preparedness	30.067	166	.000	2.65369	2.4794	2.8279

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

The significant value 0.000 was less than the p-value 0.05. Since 0.000<0.05, it was concluded from the test that there was evident significant relationship between the means. Therefore, the null hypotheses was rejected and the alternative accepted. Further output gave an estimate for the mean difference between the two means (2.65369). Therefore on examining the effect of level of lecturers' preparedness on quality of examinations, we can say level of lecturers training has an evident direct effect on the quality of examinations. The findings supports Chabaya (2015) on academic staff development in higher education institutions who concluded that universities are well positioned to develop new ideas through training opportunities to the lecturers in the quest of providing a critical mass of skilled and educated staff in variety of disciplines to achieve sustainable and developed examination system.

This study therefore depicts that in order for examination system in Kenyan universities to be effective it has to undertake reforms to raise the quality of education and training through changes in content and pedagogy. Lecturers' preparedness is viewed as essential to increase their knowledge, skills, attitudes and beliefs in enabling students to learn at high levels. Professional training Excellence in Higher Education empowers university lecturers in selected public universities with teaching skills which

would translate to achieving learning objectives through quality examinations and therefore it is hoped that participants would be encouraged to stimulate within their respective universities attention to the role of lecturers as teachers and to make a contribution to the process of institutionalizing their training especially on how examinations are set and administered to measure the learning outcomes and the course objectives.

The study also supports the argument of Al-swalha (2017) on training needs of faculty members in Al-huson College for employing multimedia in teaching who concluded that the training program is to give trainees the knowledge, skills and trends, and the end of follow-up by which track the progress of the training program is to ensure its success in achieving its objectives and also suggested that the identification of training needs is one of the main roles that the training departments in the universities should focus since in the absence of a clear definition and precise needs of the training is wasted effort and thus this study suggests that in the surveyed universities most of the respondents were highly in need for being trained in matters related to the examinations setting as suggested by their low responses on the statements related to training of lecturers and quality of examinations.

University Standards and Guidelines

The study also 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.

Table 9: University standards and guidelines, administrative procedures and quality of examinations (n=167)

	N	C	R	S	RA	NA	M	SD
Commission of university education guidelines and regulations are taken into consideration during examination question paper moderation process every semester	167	5.4	21.0	31.7	21.0	21.0	3.311	1.177
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	5.4	22.2	26.3	21.6	24.6	3.377	1.225
CUE audit feedback is shared to the lecturers on time for improvement once done	167	17.4	21.6	19.8	28.1	13.2	3.0180	1.315

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 were 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 did 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 the t-test statistic. The following hypotheses were tested;

H_{a2} : There is 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.

H_{02} : 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 decision rule was that reject H_0 if the test statistic is extreme, either larger than an upper critical value or smaller than a lower critical value at 95% confidence level. The results are indicated on Table 10.

Table 10: 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					95% Confidence Interval of the Difference	
	T	Df	Sig. (2-tailed)	Mean 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 significant value 0.000 was less than the p-value 0.05. Since 0.000<0.05, it was concluded from the test that there was evident significant relationship between the means. Therefore, the null hypothesis

was rejected and the alternative accepted. Further output gives an estimate for the mean difference between the two meant (3.23553).

Quality of Examinations Measurements

Table 11: Quality of examinations measurements (n=167)

Quality of examinations measurements	N	NE	R	S	MT	A	M	SD
		%	%	%	%	%		
The questions are clear and stated clearly for the students to understand each semester	167	1.2	0.0	3.0	36.5	59.3	4.527	.675
The instructions are clear and stated clearly	167	1.2	1.2	1.2	47.3	49.1	4.419	.697

for the students to understand each semester

The questions do not have errors in terms of typing errors, misspelt words, unclear graphics or grammatical mistakes	167	1.8	1.2	17.4	49.7	29.9	4.048	.827
The questions cover at least 75% of the course content for the unit taught each semester	167	0.6	2.4	10.8	53.3	32.9	4.156	.752
The questions are competency based and test both theory and practical aspects of the teaching each semester	167	1.8	2.4	13.2	47.9	34.7	4.114	.853
The questions are based on the learning objectives of the course	167	1.2	3.0	10.2	50.3	35.3	4.156	.814
The questions follow the Bloom's taxonomy each semester	167	0.6	21.6	25.1	29.3	23.4	3.533	1.091
The questions test the affective domains of learning each semester	167	0.6	22.2	23.4	34.7	19.2	3.497	1.0578
The questions test the psychomotor (skills) domains of learning each semester	167	2.4	20.4	25.7	31.1	20.4	3.467	1.102
The marks are allocated proportionately on each question	167	1.2	2.4	15.6	37.7	43.1	4.192	.871
The questions are standardized according to the level of students each semester	167	1.8	1.8	4.2	48.5	43.7	4.305	.789
Overall Mean Score	167	1.309	7.145	13.6	42.4	35.5	4.038	0.866

NB: NE=Never; R=Rarely, S=Sometimes; MT=Most times; A=Always

The results showed an overall mean score of 4.038 and standard deviation of 0.866. This was a strong mean score indicating that the measurements of examination quality were well understood and followed by the lecturers in the surveyed public universities. Those measures that showed high mean score included; the questions were clear and stated clearly for the students to understand each semester (Mean=4.527, SD=0.675), the instructions were clear and stated clearly for the students to understand each semester (Mean=4.419, SD=.697), the questions were standardized according to the level of students each semester (Mean=4.305, SD=.789). This was a very good measure of quality of examinations as the

study as shown that what was done in examination was mostly proofreading to eliminate errors. The study also learned that only one examination was set hence lecturers were sure of the examination to be administered is the examination they had set for that semester. The question papers are hand written and any slight change done on the paper, the lecturer get to know it during proofreading before massive question paper production at the examination centers.

Moderation as proofreading was done to ensure examination had quality, but did not eliminate all the errors in term of typing errors, misspelt words, unclear graphics or grammatical mistakes as this had

79.6%, leaving errors at 20.4% confirmed by calculated (Mean=4.048, SD=0.827) . This could be attributed to the proofreading being done just for hours at examination office before printing or photocopying of question papers in masses. This could also be due to papers which were submitted late hence had not gone for moderation. This could also be due to papers which had not been identified as having been corrected having not been proofread. The study further established that most times the marks were allocated proportionately on each question (Mean=4.192, SD=.871). However on mark allocation per question, a look at set question papers as shared sample to check on the guide for mark allocation, the question paper could not guide, as the questions were not specific how many points the student were to discuss or explain. There was no marking scheme during paper submission which could guide to confirm the marks allocation as being balanced to the question requirement. According the dean/head of department the marking scheme were submitted to the office by the academic staff once examination had been marked together with the scripts and that none was availed too for confirmation as a document to the researcher, due to said archiving challenge. This was in contraction to the laid down universities standards and guideline 2014 on setting and moderation of examination which requires examination paper to be submitted together with the question paper marking scheme (commission for university education, 2014). This contradicted item response theory in that there are no guides on how each mark had been allocated on the question paper for weight nor were there marking scheme. The validity theory was also violated due to absence of the marking scheme, required for use during moderation to validate the question answers responses adequacy and weight. This too was not on agreement with the internal university ISO-Standard Operating Procedures as documented neither as given in a strategic plan (Eucharria, 2012; Gudo *et al.*,2011).

The study further established that the questions covered at least 75% of the course content for the unit taught each semester (Mean=4.156, SD=.752), questions are based on the learning objectives of the course (Mean=4.156, SD=.814.) and that the questions are competency based and test both theory and practical aspects of the teaching each semester (Mean=4.114, SD=.853). This was also positive response from the academic staff as they know what is expected of them to set quality examination. However they did not submit the course outline, the marking scheme with the question papers to the dean/head of department to be assembled to the moderators to confirm with.

Content coverage being at least 75% on the question paper each semester (Mean= 4.156, SD=.752) and learning objectives being the guide for action verb used and to ensure each topic was tested (Mean= 4.156, SD= .814).This was a good mean to ensure quality of content coverage and learning objectives. This was so as the individual university examination guideline had given the acceptable percentage as at least 75%. Despite this positive response on content coverage and learning objectives how the administrators verified that the content and learning objective had been done, any retained or maintained document was not availed. This was so as the academic staff only submitted only question paper alone without any attachment during delivery to dean/head of department.

The statements that showed low mean score are; the questions follow the Bloom's taxonomy each semester (Mean=3.533, SD=1.0910), the questions test the affective domains of learning each semester (Mean=3.497, SD=1.0578) and the questions test the psychomotor (skills) domains of learning each semester (Mean=3.467, SD=1.102). The low mean for testing cognitive domain as by Bloom's taxonomy, affective domain and psychomotor domains contradicted the statement that the questions are competency based and test both theory and practical aspects of the teaching each semester (Mean=4.114,

SD=.853). This is a pointer to the training aspects on the techniques of setting examination where the terminologies with low means are used. Hence setting questions which tested all domains of learning for knowledge, skill/Strategies and disposition/values was low either due to minimal understanding on how to do it. Un indented revelation from the collection of

questionnaires which had been dropped for picking later, most academic staff who had not done education and had not been trained on examination had to wait to be explained what bloom taxonomy, psychomotor and affective domain where for them to respond.

Table 12: Summary of research hypotheses test results

Objective	Hypothesis	P-value	Comment
To determine the influence of lecturers' preparedness on examination setting techniques and quality of examinations in public universities in Kenya.	H ₀₁ : There is no significant relationship between lecturers' preparedness on examination setting techniques and quality of examinations in the public universities in Kenya.	0.000	Lecturers' preparedness on examination setting techniques is a predictor of quality of examinations H ₀₁ was rejected
To examine the influence of university standards guideline on the relationship between administrative procedure of setting examination and quality of examinations.	H ₀₂ : 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.	0.000	University standards guideline on the relationship between administrative procedure of setting H ₀₂ was rejected

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Majority of academic staffs did not undergo trainings annually. Most of the universities did not train their academic staffs frequently on examination setting techniques as a professional skill. Majority of those who indicated having undergone training do their training at the respective schools in their universities. The institutions scheduled and budgeted for training once a year. The trainings were done only for the new teaching staff and that the highly qualified academic staff got trained more than less qualified. There was neglect on planning and budgeting for the training by

the administration of various universities in Kenya, this was indicated by the high response on no annual trainings offered at the universities yet it had been budgeted for. Most academic staff used their own knowledge and experience in setting the assessments as opposed to professional development trainings. Therefore this may amount to redundancy in the assessment and ineffective learning process among universities.

That handful of the senior academic staff underwent trainings mostly done annually in the universities as compared to school level. This was a small percentage considering the importance of

examination and more to the quality of education which advocates consistent training for lecturers by experts. Insufficient training may thwart the learning process since the lecturers do not possess the required knowledge and skills for setting quality examination to cut across all domains of the learning process.

Training did not take place at department level and this may be attributed to the fact there was little seriousness and resources put in for training to take place at this level. Moreover, not all academic staffs were involved in the internal moderation and barely do external moderation of question paper happen. Therefore, the gaps for training cannot be identified to authorize training, hence need to scale down the training to departmental level and to involve all academic staff.

Individual professional needs on setting and administration of examinations were rarely met by continuous staff professional development programme neither by coaching and mentorship in their universities due to lack of planning. This needed to be strengthened and more in-serve programmes for continuous staff development and coaching and mentorship be planned activities which have budget. These two modes of training of academic staff should be strengthened as they looked practical and attractive.

It was concluded therefore that there is minimal supervision and training in terms of examinations and assessments at the public universities in Kenya. Hence supervision need to be intensified so that gaps can be noted to enable planning, scheduling and budgeting for training to fill them.

University standards and guidelines were found to 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 were not fully taken in to consideration during the moderation of examinations question papers for every semester.

The conclusion on quality of examination was that if all feedback as required was provided by all the involved members in the academic circle from curriculum development, curriculum implementation and curriculum evaluation and assessment and get utilized as required, the quality of examination would automatically lead to quality in education and examination malpractices would be eliminated. The universities would produce graduates respected by the society for their knowledge, skills, competences, values and ethics. Corruption in the work place will end due to high ethical standards which come with knowledgeable people through authentic route.

The Challenges Faced on the administrative procedures of setting examinations

The conclusion on challenge was that they were all due to lack of practical knowledge and reliance on the theoretical knowledge. The theoretical knowledge which is mostly put down as documents should always be broken down through practical demonstration and by used of dummies during in-serve trainings. The challenges were also due to equating academic knowledge to professional knowledge. They were also due to inadequate resources which was the main contributor even to the above indirectly.

Recommendations

On preparedness, the academic registrar and students affairs need to liaise with the lecturers to develop an effective assessment of examination. This can be done by lecturers being subjected to some training to enable them develop a free, valid and all-inclusive course examination. The government needs to show its commitment to higher education by giving more funds to cater for training of lecturers in the public universities. There must be maximum support through scholarship of lecturers training as evidence of institutional commitment and contribution to the quality of teaching, learning and assessment outcome. There must also be proper way of promoting the internal training culture through active

dissemination and make sure lecturers know the teaching and learning framework they operate within and why institution /programme/student-teacher interaction is important. This can be through making sure that all initiatives to foster training involve lecturers from the outset as well as deans, heads of programmes and other academic administrators/team leaders who are drivers of change.

Suggestions for Further Research

More research needs to be done in the area of lecturers' preparedness in setting examination to ensure quality of examinations as a comparative study between both public and private universities in Kenya. This would give more insight on how the two categories of universities apply their overall outcome compared as a result of quality of examinations.

Another area of interest is findings out the different forms of examination procedures and its impact on

the quality of examination in private universities. It could highlight whether different forms of administration procedures in terms of whether a combined administration team is created, or whether separate administration teams are used to manage the quality of examination and how procedures are followed in different universities. It would be interesting to see the advantages and drawbacks of different examination procedures in each university whether public or private, as well as which procedure and guidelines has been most effective in enhancing quality of examinations.

This study did not involve the students in examining the lecturers' preparedness in setting examination and quality of examination. Therefore there should be a study done with students' response on how they perceive the quality of their university examination. This would be an important input for feedback as students are important stakeholders.

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