Quality Issues in Kenya's Higher Education Institutions

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Abstract

The capability of higher education institutions (HEIs) to serve as drivers of economic competitiveness is reducing in different developing countries due to numerous constraints which interfere with their quality. This article empirically investigated the quality assurance practices in Kenya's HEIs, efficacy of the frameworks used, gaps and opportunities for improvement. Perceptions on eight dimensions of quality, namely, governance and management, programme planning and management, curriculum development, teaching and learning, infrastructure, assessment, research, publication and innovation and programme results were sought from three categories of respondents in eight universities.

Data were collected from a sample of 136 academic staff, 340 students, and 34 staff of quality assurance directorates out of a total of 222,384, and 38 targeted respondents respectively. A 7 point Likert scale: questionnaire (ranging from 1= Strongly Disagree to 7 = Strongly Agree) was administered. The quantitative data was corroborated through interviewing the three respondent groups in the study. Analysis of gaps depicted by the differences in the weighted averages of responses of staff of quality assurance directorates and academic staff, staff of quality assurance directorates and students, and academic staff and students was done. Each HEI was first analysed individually and then findings were consolidated to obtain the overall gap on each quality dimension studied across all participating HEIs.

Results indicated revealed gaps in each of the eight dimensions of quality investigated and showed Kenya's HEIs were at different levels on the quality continuum. Hence as the results are suggestive of room for improvement, HEIs

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have the opportunity to benchmark with local HEIs that have progressed on certain parameters of quality and, evolve homegrown models of best practice. This will enable these institutions to continuously improve their positioning on the quality continuum which is a key tenet of quality management. The most challenged dimension was research and publication. The research recommends that Commission for University Education (CUE) should strengthen accountability mechanisms in the HEIs. It brings to the fore the need for HEIs to develop and strengthen their collaborations and networks between themselves and with industry.

Résumé

La capacité des institutions de l'enseignement supérieur (IES) à servir de vecteur de la compétitivité économique est en train de se réduire dans les différents pays en voie de développement en raison des nombreuses contraintes qui entravent leur qualité. Le présent article est une analyse empirique des pratiques de l'assurance qualité dans les IES kenyanes, l'efficacité des cadres utilisés, les écarts et les opportunités d'amélioration. Les perceptions sur huit dimensions de la qualité, notamment, la gouvernance et la gestion, la planification et la gestion de programme, le développement de curriculum, l'enseignement et l'apprentissage, les infrastructures, l'évaluation, la recherche, la publication et l'innovation et les résultats de programme ont été recueillis chez trois catégories de personnes interrogées dans huit universités.

Les données ont été collectées à partir d'un échantillon de 136 personnels académiques, 340 étudiants et 34 personnels des directions de l'assurance qualité sur un total de 222.384 et 38 personnes interrogées ciblées respectivement. Des questionnaires stylisés sur une échelle Likert de 7-point : 1= fortement en désaccord : 7= fortement d'accord ont été administrés. Les données quantitatives ont été corroborées à travers l'entretien avec les trois personnes interrogées dans l'étude. L'analyse des écarts représentés par les différences dans les moyennes pondérées a porté sur les réponses du personnel des directions de l'assurance qualité et les personnels académiques, du personnel des directions de l'assurance qualité et les étudiants, et du personnel académique et les étudiants. Chaque IES a été d'abord analysée individuellement et les résultats ont été ensuite consolidés pour obtenir l'écart global sur chaque dimension de qualité de dimension étudiée dans toutes les IES.

Les résultats indiquent qu'il y a eu des écarts dans chacune des huit dimensions de la qualité étudiées et les IES kenyanes à différents niveaux ont été sur le continuum de la qualité et pourraient être encore améliorées. Cela indique que les IES ont l'occasion de se comparer avec les IES locales qui ont fait des progrès sur certains paramètres de la qualité et sont par conséquent, des exemples de modèles de bonne pratique développés en interne. Cela permettra à ces

institutions d'améliorer de façon permanente leur position sur le continuum de la qualité qui est un principe clé de la gestion de la qualité. La recherche et la publication sont la dimension la plus en difficulté. La recherche recommande à la Commission de l'enseignement universitaire (CUE) de renforcer les mécanismes de redevabilité dans les IES. Elle met en avant le besoin des IES de se développer et de renforcer leurs collaborations et les réseaux entre les IES elles-mêmes et avec le secteur.

Mots clés : Assurance qualité, perception, écarts, Kenya, enseignement supérieur

Introduction

Expansion in higher education experienced by many countries has highlighted the dichotomy between quality and quantity of education (Malechwanzi and Mbeke 2016). Kenya is no exception to this dilemma. Quality improvement has therefore emerged as one of the most important issues in global higher education policy. The higher education sector in Kenya has in the recent past expanded greatly both in terms of the number of institutions and in student enrolments. Enrolments to state universities rose by 41 per cent from 195,428 students in 2012 to 276,349 by end of 2013 (Nganga 2014). According to the Kenya National Bureau of Statistics (KNBS) (2015), the combined student enrolment in public universities and private accredited universities in Kenya in the academic years 2009/2010–2014/2015 grew from 142,789 to 446,183 representing a whopping increase of 213 per cent. The number of higher education institutions in Kenya has also expanded from one institution, the University of Nairobi (UON) in 1970 (Sifuna 2010) to seventy one universities comprising thirty-five public HEIs and thirty-six private HEIs in 2017 (CUE 2017).

Challenges Facing Higher Education in Kenya

Ogeto (2015) contends that the high student enrolment in universities exacerbated by high enrolment of self-sponsored students has led to a shortage of facilities and services. In agreement, a World Bank Report dubbed 'Kenya's Education Achievement and Challenges' faulted Kenya's education system for failing to produce graduates with the knowledge and skills that are considered crucial for Vision 2030 (Wanzala 2015). Kenya's Higher Education Institutions are therefore increasingly experiencing a wave of unprecedented demands from their stakeholders namely students, staff, government, employers and society among others (Marwa 2014). This is despite the fact that Kenya's economic blueprint Vision2030 identifies higher education as the highway through which Kenya's development goal of being a middle income and industrialist country will be realised (GoK 2007).

As articulated in Kenya's education 'master plan' (MoEST 2007), quality education should demonstrate a shift in focus away from simply passing exams towards an approach that encompasses the discovery of talents and the development of analytical, cognitive and creative potential, enhanced by the prudent utilisation of resources. This probably explains why Ludeman *et al.* (2009) assert that higher education institutions in Kenya now need to focus on students and put their needs at the centre of all that they do.

Unfortunately, the increase in enrolment between 2009/10–2014/15 as revealed by the Kenya National Bureau of Statistics (2015), for public and private universities has not been matched by improvements in physical infrastructure or levels of expertise (Kuria and Marwa 2015). This dissonance is reflected in the conjecture by Kenya's Cabinet Secretary for Education, Science, and Technology, Dr Fred Matiangi, that he was both impressed and bewildered by the state of Kenya's higher education and that urgent measures were needed to enhance support to avert further decline into tribalism, nepotism, greed, and poor quality of learning and research (Anderson 2015). Mbirithi (2013) observed that the quantitative leaps in the number of universities in Africa (Kenya included) coupled with similar trends in student enrolment have given rise to concern for quality given that upgrading of resources has not matched the rate of enrolment growth. As stated by Okwakol (2008) most African universities lack adequate physical facilities, such as lecture rooms, offices, library, and laboratory spaces, to provide a suitable learning and teaching environment.

As Kenya's higher education sector has grown, the need to regulate its quality has correspondingly been growing. As a result, the government established the Commission for Higher Education (CHE) in 1985 for regulating quality assurance in higher education with its initial focus being regulation of private universities to ensure they met academic quality standards. However, a comparable risk was later identified for public universities and, since the enactment of the *Universities Act 2012*, all universities in Kenya must be chartered and their programmes accredited under the regulation of the CUE which serves as the external quality assurance mechanism. Universities are expected to institutionalise their own internal quality assurance mechanisms (CUE 2014). Wanzala (2013) fears that despite the existence of regulatory agencies, quality control remains one of the most critical issues in the history of higher education in Kenya.

Statement of the Problem

Despite the efforts by the government of Kenya to expand university education by injecting significant sums of money into higher education and enhancing the quality assurance only a few studies have investigated and mapped the

extent to which each of Kenya's HEIs have made progress in conforming to quality assurance practices with respect to student learning and teaching as well as academic offerings. This study was therefore informed by the need to empirically investigate the quality assurance practices that each of Kenya's HEIs is employing and the efficacy of the frameworks used.

Conceptual Framework

This article focused on the study of quality assurance of teaching and learning in Kenya's HEIs. The study adopted the attributes developed by the African Quality Rating Mechanism (AQRM), a tool developed by the African Union Commission (AUC) in collaboration with the African Association of Universities (AAU). The AQRM conceives measurement of quality in teaching and learning in higher education in attributes similar to those conceptualised by the Inter-University Council for East Africa (IUCEA) and DAAD (2010) tool. The tool was contextualised to suit variables provided by the IUCEA and DAAD, (2010) tool for assessing quality at programme level and which were suitable for Kenya. Quality assurance was conceptualised as a function of the eight dimensions:

a) Governance and management measured through four attributes : i) the clarity of the university vision, mission and values to stakeholders; ii) representation of staff, students and external stakeholders in governance; iii) development of quality assurance policies; and iv) availability of a management information system to manage student data and track student performance;

b) Programme planning and management measured through five attributes: i) programme alignment to overall institutional mission and vision; ii) allocation of resources to support programme; iii) allocation of a programme coordinator for managing and ensuring quality; iv) mode of delivery takes account of the needs and challenges of all students; and v) students' involvement in curriculum evaluation;

c) Curriculum development operationalised with eight attributes: i) its clarity in specifying target learners for the programme; ii) specification of learning outcomes for each course and the programme; iii) the regular reviews take account of new knowledge and learning module; iv) courses in the curriculum are coherently planned and well sequenced; v) the curriculum is well balanced in terms of knowledge, skills and attitude students should acquire at end of their learning experience; vi) involvement of employers in the development of the curriculum; vii) involvement of alumni in the development of the curriculum; viii) and involvement of students in the development of the curriculum;

d) Teaching and learning operationalised with eight attributes: i) availability of qualified and competent teaching staff; ii) adequacy of teaching staff; iii) variety of teaching and learning methods are used based on the learning outcomes; iv) institution has procedures for inducting teaching staff into teaching methodologies; v) students have opportunity to consult with teaching staff in small groups; vi) the institution has policies and procedures that guide development and implementation of the curriculum; vii) teaching and learning include industrial placements and practical training for students; and viii) the students are provided with academic support;

e) Infrastructure was measured with six attributes, thus: i) institution has sufficient lecture spaces for the programme; ii) lecture halls have internet access and projectors to allow for power point presentations; iii) laboratory facilities are adequate for the programme; iv) academic and administrative staff have access to computer resources and the internet; v) lecture halls are well maintained and are secure; and vi) students have access to electronic library resources to support teaching and learning;

f) Assessment operationalised with five attributes, thus: i) institution has systems in place for external examiners; ii) students are provided with clear information about mode of assessment for all modules in the programme; iii) assessment methods are designed to measure how well learning outcomes have been mastered by students; iv) a variety of assessment methods are used in the programme; and v) marking and grading criteria in the programme are consistent and clear;

g) Research, publication and innovation operationalised with five attributes including: i) availability of a research and publications policy; ii) staff and students publications in accredited academic journals; iii) university encourages and supports students and staff to present their research at national and international conferences; iv) sufficient budget to support research work by staff and students; v) rewards students and staff for their research work; and

h) Programme results operationalised with five attributes: monitoring of student progress throughout the programme and provision of early warning; acceptability of the completion rates per cohort within the defined duration of the programme; established linkage with potential employers that facilitate graduate employmen; availability of structured system for feedback from the labour market on achievement of graduates; and availability of structured system for feedback from alumni.

Research Design

This study employed a mixed methods research design. The study embraced a multi-stakeholder approach which included the following, staff of the quality assurance directorates, academic staff and students. The approach was adopted to allow for triangulation of perceptions and present differences in opinions between the different stakeholders. The study was a cross sectional survey that included the use of questionnaires and interview schedules. Throughout the study, the responses of students and academic staff were used as the control group to corroborate responses by the staff of the quality assurance directorates. Staff members of the quality assurance directorates are considered custodians of quality assurance policies and practices in Kenya's HEIs. In the study, the East African Quality Assurance Framework developed jointly by the IUCEA and DAAD (2010) was applied in interrogating quality assurance practices in the eight universities. This is because the universities were expected to apply the framework in driving quality assurance practices in their respective institutions. The research sought to track compliance or adherence of these institutions to the framework. The study had three sampling units namely all final year Students in session during the April–August session 2014 in the sampled Universities, all full time academic staff, and all Staff of the Directorates of Quality Assurance in the participating Universities.

Multi-stage sampling was employed. Initially, stratified random sampling was applied to select two departments from each faculty followed by systematic random sampling that was used to select 384 students out of a total population of 8,405 final year students. The sampling guide developed by Isaac and Michael (1981) was used to sample 384 students at the 95 per cent confidence level. Likewise, a sample size of 222 out of a total population of 999 full-time academic staff at the 95 per cent confidence level was proportionately sampled using the sampling guide by Isaac and Michael. A census was done for the staff in the directorates of quality assurance which comprised the director(s) of quality assurance, the administrative staff and the secretaries for a total of 38 from all the eight Universities sampled.

The study employed the use of questionnaires and interview schedules. Focus group interviews were applied to students but for academic staff and staff of the quality assurance directorates, one-on-one interviews were employed. Eight HEIs in Kenya comprising four public and four private were randomly sampled on the basis of their year of establishment and according to their status of incorporation (i.e. either private or public) HEIs. These HEIs included Daystar University, Moi University, Jomo Kenyatta University of Agriculture and Technology, Dedan Kimathi University of Technology, Technical University of Kenya, Kenya Methodist University, Saint Paul's

University and KCA University. The universities were sampled because they had used the tool for assessing quality at the programme level developed by the IUCEA and DAAD (2010).

Data Analysis

Both quantitative and qualitative approaches of analysis were used to complement findings across methods. The quantitative data were presented in a summary table of the differences in weighted averages of i) responses from academic staff versus staff of quality assurance directorates, ii) responses of students from that of staff of quality assurance directorates and iii) responses of students from those of academic staff. The overall average weighted scores on each dimension for each university were then consolidated into a table (see Table 1 below). To compute the overall perceptual gap on each university, an average of the perceptual gaps (weighted differences) between the categories of respondents was obtained. The HEIs were ranked on the basis of the average of the perceptual gaps (weighted differences). The HEIs with low gap values were ranked higher than those with high gap values with respect to quality assurance provisions (QAPs) in Kenya's HEIs. In this study, qualitative data analysis was carried out through content analysis. The quantitative data was analysed concurrently with the qualitative data (Creswell and Tashakkori 2007). The first phase of the study which was quantitative was exploratory, while the second phase of the study which was qualitative was confirmatory (Cameron 2009). The results from quantitative and qualitative data were triangulated to form the basis for the conclusions and recommendations for this study.

Validity and Reliability of the Instruments

This study had three questionnaires: one for students, one for academic staff, and one for quality assurance officers. The students' questionnaire had forty- six items with a reliability of approximately 95 per cent. The quality assurance and academic staff questionnaires were similar with fifty-eight items with reliability of 91 per cent. To determine reliability, the instruments were analysed using Cronbach's alpha which measures the internal consistency and how well a set of items measure a single construct. The reliability of all the questionnaires used in this study had Cronbach's alpha values well above the minimum of 0.71 recommended for social sciences (Bryman and Cramer 1995).

Both qualitative and quantitative methods were combined through triangulation to validate the instruments. To clean the scale items in the questionnaire and establish reliability of the scales, the researcher conducted a pre-test. The questionnaires were given to experts in quality assurance

and management in Kenya's HEIs (from institutions not included in the sample) to validate the questions. Their comments were integrated into the final scales applied.

Results and Discussion

The study targeted 384 students but 340 questionnaires were returned realising a response rate of 89 per cent. Out of the targeted 222 academic staff questionnaires, a total of 136 were returned yielding the response rate of 61 per cent. For staff of quality assurance directorates, a total of 38 were targeted but 34 were returned realising a response rate of 89 per cent. According to Mugenda and Mugenda (2003), a 50 per cent response rate is adequate, 60 per cent is good and above 70 per cent rates very well. The differences in the perceptions measured by the differences in weighted averages of the following categories of respondents in the research: staff of quality assurance directorates versus academic staff; staff of quality assurance directorates versus students; and lastly academic staff versus students in each of the eight targeted universities were analysed and the results of the weighted scores presented in a table. The differences between the weighted averages in responses of respondents on each attribute represented the gaps. The differences between the weighted averages were taken as absolute whether positive or negative. An average of the differences between the weighted averages on each attribute between the various respondents was calculated to obtain the overall average score (gap) on each dimension for each university. The overall average score on each dimension was used to establish the level of compliance in diffusing that quality attributes in each of the universities surveyed. Each of the universities was initially analysed individually. An overall university average was obtained by computing the average of the sum of overall averages score (gap) for all dimensions for each category of respondents in the eight universities sampled. The overall university average depicted the overall perceptual country average on all dimensions which was used to rank the universities.

University Rankings

University rankings also called league tables and report card (RC) are lists of certain groupings of institutions (usually but not always within a single national jurisdiction) comparatively ranked according to a common set of indicators in descending order (Usher and Savino 2007). Ranking of the universities in the study was based on a 1-7 Likert scale as an instrument of measure. In this study, ranking was done to determine indicators of university(ies) that provides best practice on each dimension surveyed. Later, the ranking focused on the overall performance of each university on all the

quality dimensions surveyed. An average of the perceptual differences on each attribute was calculated to obtain the overall average score (gap) on each dimension for each university. The universities were then ranked on the basis of the scores of the overall average scores (gaps) on each dimension. Those with low average gap values were ranked higher than those with high average gap values with respect to QAPs in Kenya's HEIs. Universities which exhibited the highest gaps between the three cadres of stakeholders (students, quality assurance and academic staff) were taken to be low on the rank of best practice. Ranking of the universities was done to assess the positioning of each on the quality continuum in order to identify best practices among them on each of the dimensions of quality. The ranking also provided the quality aspects that are good and need to be sustained for improvement in Kenya's HEIs and which can serve as benchmarks for others in their journey to growing quality. Mwiria *et al.* (2007) had advised that Kenya's HEIs should develop their own institution-wide ratings so as to effectively exploit opportunities for improvement.

To obtain the overall performance of each university in regard to all quality dimensions surveyed, an overall university gap was ascertained. The overall university gap was obtained by analysing the overall average gaps on each of the eight quality dimensions surveyed in the study between the perceptions of the three cadres of stakeholders (students, quality assurance and academic staff) on each of the eight quality dimensions surveyed in the study. The overall university gap depicted the overall performance of each university on all the dimensions surveyed hence its ranking (positioning) on the quality continuum.

Table 1 provides the consolidated findings of the overall average gaps on each of the quality dimensions as perceived by the three cadres of respondents for the eight universities assessed in the study. It provides an overview of the best quality aspects of each of the universities to be sustained and which can serve as benchmarks for the others on their pursuit of quality.

University	Gouvernance			Planning			Curriculum			Teaching			Infrastructure			Assessment			Research			Results			Overall Univ gaps		
	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST	QAS/AS	QAS/ST	AS/ST
DU	1.0	1.5	0.5	0.8	0.8	0.1	0.5	0.8	0.5	0.7	1.0	0.3	0.5	0.7	0.2	0.8	1.0	0.2	2.6	2.5	0.2	1.0	0.2	1.0	1.0	0.8	0.4
MU	1.3	1.8	0.5	0.8	1.2	0.4	1.0	1.5	0.5	1.3	1.5	0.2	1.6	1.7	0.1	1.4	2.0	0.6	1.4	2.3	1.0	1.4	0.8	0.6	1.3	1.2	0.5
JK	2.2	2.0	0.2	1.6	1.0	0.6	1.3	1.6	1.3	2.4	1.4	1.0	1.5	1.3	0.2	1.2	1.6	0.2	1.8	2.3	0.5	1.6	0.3	1.6	1.7	1	0.6
KM	2.0	3.2	1.2	1.6	2.6	1.0	2.0	3.0	1.0	1.8	2.2	0.4	1.0	1.0	0.4	2.2	2.0	0.8	1.8	1.8	0.6	2.4	2.2	0.2	1.9	2	0.7
DK	3.0	3.3	0.3	2.8	2.8	0.6	2.7	3.0	0.3	2.1	2.7	0.6	3.0	3.2	0.2	2.5	2.8	0.2	3.2	3.4	0.2	2.6	3.4	0.6	2.7	2	0.5

TU	3.2	2.0	1.2	2.8	1.8	1.0	2.5	1.9	0.6	2.9	2.7	0.2	2.5	1.7	0.8	2.8	1.8	1.0	3.0	2.4	0.4	2.8	2.0	0.8	2.8	1.9	0.8
KC	3.5	2.5	1.0	2.6	3.2	0.6	2.7	1.9	0.5	2.0	1.4	0.8	2.4	1.9	0.5	2.6	2.0	0.6	3.0	3.4	0.4	3.8	2.8	1.0	2.8	2	0.7
SP	3.8	3.8	1.0	3.2	3.2	0.2	3.0	3.0	0.7	2.1	2.2	0.1	3.0	3.0	0.1	4.0	4.0	0.2	4.0	4.0	0.2	3.0	1.6	0.4	3.3	3	1
Over dimension performance	2.5	2.5	0.7	2.0	2.1	0.6	1.9	2.0	0.7	1.9	1.9	0.4	2.0	1.8	0.3	2.1	2.1	0.4	2.7	2.8	0.3	2.4	1.6	0.8	2.2	2.1	0.5

Table 1: Overall Gaps in the Dimensions of Quality in the Universities

QAS	Quality Assurance Staff	DU	Daystar University	KM	Kenya Methodist	KC	KCA University
AS	Academic Staff	MU	Moi University	DK	Dedan Kimathi University	SP	Saint Pauls' University
ST	Students	JK	Jomo Kenyatta University of Technology	TU	Technical University		

Governance and Management Dimension

Evans (2005) argued that every article and book written about quality focuses on leadership which is also one of Deming's 14 points on quality. Leadership is also the first category in the MBNQA criteria. The picture that emerged in Table 1 was that the lowest overall gaps on attributes of governance and management dimension were observed at DU between perceptions of the quality assurance staff and academic staff, and quality assurance staff and students. Interviews with staff revealed DU had involved staff and students in the formulation of the quality assurance policies and procedures of the university. This approach had contributed immensely to the ownership of these policies amongst the staff and the students in the university. The university's practices therefore provide benchmarks for best practice on this dimension to other HEIs in Kenya in their quest to growing quality. Table 1 shows DU was closely followed by MU which registered the second lowest overall average perceptual gaps between all respondents. JK led on perceptual differences between academic staff and students on governance and management, which implied the university had successfully diffused these attributes best between its academic staff and students compared to the other universities surveyed and was therefore an example of good practice.

According to perceptions of quality assurance staff and academic staff in the HEIs studied, SP emerged with the highest gaps on the governance and management dimension followed by KC and TU, in that order. SP equally had the most unfavorable rating according to the quality assurance staff and the students. DK and KM came second and third according to this category of respondents. The findings were indicative that SP, KC and TU could benchmark on good practices on governance from DU, MU and JK.

KM and TU were the most challenged on governance and management according to the academic staff and students. They were followed by SP and KC. Interview data from staff of the quality assurance directorates confirmed that the quality assurance offices are grossly understaffed and operate as a one person unit. Though the quality assurance directorates have developed many quality assurance guidelines, they are, unfortunately, not implemented by management. An analysis of interview data from students across the eight universities confirmed that the HEIs have limited involvement of students in strategic planning activities and policy development. The findings affirmed the results by Olayo (2005) who, in a study of selected Kenyan universities found their efficiency and effectiveness to be reducing as a result of low levels of participation in decision making by their staff and students. The findings indicated that JK followed by DK were doing well in diffusion of quality assurance attributes between academic staff and students; hence, these sites were examples of good practice that KM and TU can emulate.

Lewis *et al.* (2006) observed that top management is responsible for establishing a unity of purpose and direction in order to generate and maintain an internal environment in which employees can be fully involved in achieving the organisation's goals. The governance and management dimension had the second largest overall gaps amongst the quality dimensions investigated as indicated in Table 1. Overall, results pointed to challenges in management support for quality assurance in Kenya's HEIs.

Programme Planning and Management Dimension

The picture that arose in Table 1 revealed that the perceptual gaps between quality assurance staff and academic staff on programme planning dimension were lowest at DU and MU. The two institutions emerged as examples of good practice on this dimension. JK and KM followed, in that order. According to these respondents, SP was rated lowest followed by TU and DK that recorded overall perceptual gaps that were similar. The results were suggestive that DU and MU provided institutions like SP and TU with benchmarking opportunities for best practice on these parameters of quality.

Gaps observed between quality assurance staff and students on this dimension were again lowest at DU followed by JK. This pointed to DU and JK being examples of good practice in diffusion of these quality attributes that the other universities can emulate. SP and KC emerged most challenged on this dimension followed by DK according to this category of respondents.

According to academic staff and students, DU was rated highest on this dimension followed by MU. DU retained its standards of good practice from which low rated institutions like KM and TU can learn.

Curriculum Development

Findings in Table 1 revealed that DU was rated most favourably on the curriculum dimension by the quality assurance staff and academic staff. This university had the lowest gaps followed by MU. The results demonstrated the two institutions have curriculum development attributes that are good practice among the sampled HEIs which should be sustained and enhanced for continuous improvement. SP had the highest challenges on this dimension followed by KC and DK.

According to quality assurance staff and students, DU emerged with lower gaps on this dimension. It was followed by MU and JK, in that order. The lowest rating on this dimension was observed at SP, TU, and DK. Observations revealed the three universities had similar, but the highest, gaps on this dimension. The findings were indicative that DU maintained its lead as an example of good practice in the diffusion of quality assurance practices with which other universities like SP, TU and DK can benchmark.

Teaching and Learning

Table 1 indicates that the teaching and learning dimension was best diffused at DU according to the quality assurance staff and academic staff. The university had the lowest gaps followed by MU and KM. The findings were indicative that DU and MU emerged with quality aspects on this dimension that demonstrate good practices and present other universities with opportunities for benchmarking. According to the quality assurance staff and academic staff, TU performed most unfavourably on this dimension followed by JK which indicated an opportunity to gain from reflecting and/or implementing practices from exemplar universities such as DU and MU.

The best performing university on teaching and learning, according to the scores of the quality assurance staff and students, was DU. This university had the lowest perceptual gaps followed by JK. According to the academic staff and students, MU was rated most favourably followed by TU. KC recorded the highest gaps, emerging the most challenged on this dimension followed by DK. Overall, most universities had challenges on the teaching and learning dimension. There was similarity in interview responses from students across most sites that the shortage of academic staff had negatively impacted on the assessment methods employed in the HEIs. There was also a shared perception by academic staff interviewed in all the HEIs that there was a growing tendency of poor work culture among the staff which manifested in lack of commitment and engagement. Staff shortage was anecdotally reported as more acute in the newly established universities.

Infrastructure

The findings in Table 1 were reflect that DU was rated best on the infrastructure dimension by the quality assurance staff and academic staff. The university had the lowest perceptual gaps followed by KM. DU and KM are private universities and mature compared to SPU and KCA that were recently established, which may explain the perceptions of good infrastructure. According to these respondents, the most challenged institutions in the dispersion of this dimension were SP and DK whose gaps were also similar.

According to quality assurance staff and students, DU was the best on this dimension. The university recorded the lowest gaps followed by KM. DK was scored lowest followed by SP on this dimension. According to academic staff and students, MU scored most favorably on this dimension followed by DU and JK. TU was observed to have the highest gaps according to these respondents. Findings confirmed results of a study by Gudo, Olel, and Oanda (2011) that examined the perceptions on the quality of service delivery and opportunities for quality university education in Kenya found that universities did not have the necessary physical facilities to effectively offer services to their students. Analysis of interview data with student focus groups were indicative that HEIs face challenges in provision of adequate and good infrastructure for teaching and learning.

Assessment

Results in Table 1 indicted that DU had the lowest perceptual gaps on the assessment dimension according to quality assurance staff and academic staff. DU therefore embodied quality attributes on assessment for good practice amongst sampled HEIs and presented opportunities for homegrown benchmarking solutions on best practice assessment methods. DU was followed by JK and MU, in that order. According to these respondents, SP registered the highest gap hence emerged as the most challenged in diffusing these attributes of quality amongst the sampled respondents. It was closely followed by TU that emerged equally challenged.

DU topped the ratings according to the quality assurance staff and students, recording the lowest gaps. JK came second registering the second lowest gaps between these categories of respondents. The most challenged university on this dimension, according to the quality assurance staff and students, was SP. The university had the highest perceptual differences followed by DK. There was consensus in the response pattern in interviews with students across the universities that assessment in the universities was flawed. Interview data from academic staff across HEIs sampled confirmed

that courses with a practical component tended to be theoretically examined due to inadequacies in practical materials and laboratories.

Research, Publication and Innovation

Findings in Table 1 depicted research, publication, and innovation dimension to be best rooted at MU followed by JK according to the quality assurance staff and academic staff. Both universities recorded the lowest gaps in that order. MU and JK stood out as examples of good practice on research, publication, and innovation dimension that can provide benchmarks for other universities within their continuous improvement agendas. MU and JK are older public universities and the findings reveal their capacity potential for research built over time. SP was observed to be most challenged on this dimension, according to the perceptual differences, in weighted scores between the quality assurance staff and academic staff. The university had the highest gaps and was followed by TU and KC both of which had similar gaps. This disjoint is reflected by Kigotho (2008) who indicates that there is an urgent need to fix the unacceptable research gap between sub-Saharan Africa and the rest of the world.

According to the weighted gaps between the quality assurance staff and students, KM emerged the best followed by MU and JK on research, innovation, and publication. The highest gaps were observed at SP followed by DK which was indicative that the two universities were the most challenged on this dimension. For many, the access to resources is seen as a challenge as indicated by Okwakol's (2008) findings that universities carry out only half of recommended experiments because 55 per cent of their laboratory equipment is unsuitable for experiments.

Programme Results

According to Table 1, the lowest perceptual difference on programme results was observed at DU which was suggestive that the institution's quality practices on programme results mirror good practice which others can emulate, MU registering the second lowest followed by JK. The most challenged university according to this category of respondents was KC. It was followed by SP and DK, in that order.

According to the quality assurance staff and students, DU was rated most favourably followed by JK and MU accordingly. DK emerged the most challenged according to the perception of quality assurance staff and students followed by KC. Results indicated that the academic staff and the students rated KM most favourably on this dimension followed by DU and MU. The highest gaps on this dimension were observed at TU.

Overall Ranking of the Sampled Universities

Table 1 displays the overall university gaps computed as averages of the respective sum of the gaps on each dimension for each category of respondents divided by the number of universities surveyed. The results revealed that Kenya's HEIs were on different trajectories of growing quality. The findings confirmed the assertion by Marwa (2014) that ingredients of quality are beginning to sprout in Kenya's HEIs. Some institutions were lagging behind, as revealed by the gaps, in the perceptions of respondents while others were doing well and are examples of good practice like DU for others to emulate in their quality journey. The results were evidence that Kenya's HEIs have room for improvement in their quality assurance practices.

Quality assurance is a continuous process and therefore there is a need for universities to continuously improve by taking stock of where they lie on the quality continuum through benchmarking and then customising the best aspects in their institutions. The HEIs should successively build on the gains they have made in the quality journey through learning and continuous improvement. The findings pointed to the need for each of Kenya's HEIs to fortify their internal quality assurance practices. This strengthening can be achieved through formulation of appropriate quality assurance policies and procedures and which should be embedded as part of their strategic plans. There is also a need for the government to strengthen external stimulation of quality assurance, though it may be regarded unwelcome, in regard to the implementation and accountability mechanisms of the internal quality assurance practices. This will foster the creation of a culture quality in Kenya's universities for continuous improvement. This can be achieved, for example, through periodically ranking and publishing of quality performance indicators on the HEIs to guide the institutions on emerging best practices. The challenge for the HEIs partly lies in finding a balance in the external quality demands and the creation of conducive conditions necessary for growing a culture of continuous improvement.

Limitations of the Study

The study was cross-sectional and used data obtained at a specific point in time. It would be useful to undertake longitudinal studies to be able to determine variations in perceptions and findings over time. Such an approach would more clearly align with the notion that quality is premised on the principle of continuous improvement.

The study also targeted only three stakeholders – namely students, academic staff and staff from directorates of quality assurance. Quality in

higher education is multidimensional; hence, it would be useful to engage other stakeholders   such as government, senior administration of HEIs, employers, and alumni.

Conclusion

The study established that each of Kenya's HEIs was at a different level of growing quality and therefore at a different trajectory on the quality assurance continuum. It also established that the weakest dimensions in quality in Kenya's HEIs were research, publication, and innovation followed by governance and management amongst dimensions surveyed. According to the findings, some of Kenya's HEIs like DU have made good progress in growing some quality dimensions, hence are examples of good practice for benchmarking purposes for those institutions lagging behind like SP. The study established that ingredients of quality were beginning to sprout in Kenya's HEIs, but there are numerous challenges in their diffusion.

The findings pointed to the need for each of Kenya's HEIs to fortify their internal QAPs which can be achieved through formulation of appropriate quality assurance policies and procedures that should be embedded as part of their strategic plans. The study pointed to the need for the government to strengthen the implementation and accountability mechanisms of the internal quality assurance practices in Kenya's HEIs order to create a culture of continuous improvement. This can be achieved, for example, through periodically ranking and publishing of quality performance indicators in the HEIs to guide the institutions on where to borrow best practices from. Limitations of the study were that it targeted only three stakeholders namely students, academic staff, and staff from directorates of quality assurance. Quality in higher education is multidimensional and hence it would be useful to engage other stakeholders like the government, senior administration of HEIs, employers, and alumni.

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