Special Issue on
**Trends in Higher Education and Quality Assurance
in East Africa**

Numéro spécial sur
**Les tendances dans l'enseignement supérieur et les pratiques
d'assurance de la qualité en Afrique de l'Est**

Guest Edited by/Rédactrice invitée
Pammla Petrucka

Contents/Sommaire

Editorial

Building the Vision: Higher Education and Quality Assurance in East Africa

Pammla Petrucka*

The East African Higher Education Quality Assurance Forum

The East African Higher Education Quality Assurance Network (EAQAN) is a network of quality assurance practitioners in the East African region. The Network was formally established in 2012 in Entebbe following the DIES (Dialogue on Innovative Education Strategies) initiative, a partnership between the IUCEA (Inter-University for East Africa), DAAD (German Academic Exchange Service) and higher education commissions in the region, to enhance quality of higher education in the East African region. The EAQAN was established primarily to provide a platform for discussion and exchange of experiences among quality assurance (QA) coordinators and other stakeholders in quality assurance, teaching and learning as well as related issues in the management of higher education.

Following agreement during the EAQAN General Assemblies the major activity of the EAQAN has been to host capacity building and knowledge sharing QA forums in May every year since 2012. The forums have been funded by the IUCEA and DAAD with expertise provided by the HRK (The German Rectors' Conference) and other higher education institutions in the region. What follows in this edition is a compilation of a selection of key papers from the 2015 forum, held in Nairobi, Kenya, where over eighty universities from Kenya, Tanzania, Uganda, Burundi and Rwanda participated, including the regulatory Higher Education Commissions of these countries.

However, bringing together some of the most progressive thinkers in a single edition is both a challenge and an opportunity when one is addressing two areas of significance. Both 'higher education' and 'quality assurance' are

* College of Nursing, University of Saskatchewan, Canada. Email: pammla.petrucka@usask.ca

socially, politically, and morally charged. This brings forward the imperative to make the implicit explicit as we examine the complex effort to balance accessible higher education with aspirations of educational excellence. To relayer the dialogue and build the vision, academic leaders in East Africa have contributed by reflecting on the status quo, articulating QA trends and outcomes, and sharing promising practices.

Reflecting the Status Quo

Throughout the contributions, quality assurance was often described as off the radar in lieu of operational, financial, and structural emphasis. Most authors mention or themselves were situated within quality assurance (audit) offices or directorates, but descriptions of these QA focal points were highly variable and roles/functions were equally disparate. Equally as oblique in form and function was the element of measurement, which many contributors intimately aligned with QA but found lacking in rigour and evidentiary base to be consistently applied.

Kakembo and Makumbi found QA programmes to be routinised and minimised to 'effectiveness and regularity of teaching and research' or products reflecting these (e.g. publication in international journals; faculty promotion; student success; university reputation) and monitoring of student welfare. They remind us that, not only do universities have the triadic mandate to teach, research/innovate, and engage, but must contribute to each core function in pursuit of pre-eminence. The article sets the stage for the reader to consider competing aspects of immersion and isolation within the university which is variably seen as a social asset and a haven for individuality. Their premise is that universities often excel at the first two vertices, but the community engagement vertex remains un/under-addressed, thereby becoming the weak link in assessing and achieving quality assurance. Their work revisits the quandary of how (or perhaps how well) does this academic milieu mesh grassroots interests with classical elitist abstractions. These authors posited that full assessment of operational and resource efficiencies, as well as quality assurance, are more likely to be achieved when legitimising and integrating all three aspects of the triad.

Mgaiwa and Ishengoma's exploration quickly draws our attention to the 'push and pull' of quality assurance and control processes within private universities in Tanzania. Government oversight (PULL) to assuring quality in higher education is met with weak institutional structures and capacities. Their insights into constraints ranging from inadequate resources (fiscal, human) to core leadership skills and commitment quickly shift (PUSH) quality assurance to the periphery. Rather than a reactive reliance on guidelines, Mgaiwa and

Ishengoma suggest a proactive embedding of a culture of quality assurance across students, staff, and faculty in the emerging context of private universities in developing contexts.

Kagondu and Marwa's consideration of quality assurance in Kenya's higher education institutions reconceptualises future efforts as collaborative and inter-sectoral rather than an internally driven process with external monitoring. This approach mirrors Karembo and Makumbi's perspective on engagement as an area of opportunity for quality assurance. The authors suggest that institutional benchmarking will not only embed the culture of quality improvement (also reflected on by Mgaiwan and Ishengoma) but take the entire process to a level of continuous improvement involving all institutional stakeholders. Such benchmarking will not only move individual institutions along the quality assurance continuum, but will potentiate diffusion to all higher education institutions.

Articulating QA Trends and Outcomes

Select contributions took us beyond the descriptive level, laying out the gauntlet on 'how to' and 'what to' assess. Within this we are taken through the maze of terminologies, taxonomies, targets, and tracers, only to come to understand that quality assurance measurement is in its infancy.

Brumwell, Deller and MacFarlane's provocative critical piece highlights relevance and risks of linking quality assurance with learning outcomes, assessment tools, and credentialling, reminding us that the global uptake of learning outcomes as indicators of student success and to inform policy must be accompanied by quantification and validation of such indices. It is clear from their global work that a shared lexicon and a classification (typology) of higher education learning outcomes are rudimentary at best and absent at worst. Their insights into the 'ripple effects' of learning outcomes for quality assurance in operations, engagement, accountabilities, institutional relevance and beyond buoy us as academics, practitioners and mentors to the potential 'tidal wave' made possible through engaging with *organizations such as Tuning *Program, EAQUAN … to define, refine and align with government, institution and employer expectations.

Tennant and Khamis broach the elephant in the room with their consideration of student evaluation of teaching, looking at this type of input as both high stakes and high potential in the quality assurance rubric. Reaching beyond the obvious assessment of the quality of the student–teacher dyad, the authors delineate student evaluations as formative rather than performance assessment tools. Of interest is their consideration of coercion free methods to gain student input linked to the intentionality to act on their findings.

Egesah and Wahome bring attention to the imperative of tracer studies which take higher education institutions, in the persona of our graduates, to the precipice of labour market expectations and futures, and quickly returns us to the reality of our need to be/become relevant and reorient to current societal demands. Within this 'near real time' exploration of Moi University (Kenya) graduate effectiveness, the author suggests the potential to adapt, adopt or abandon curriculum and/or programmes is maximised if these studies precede curriculum reviews. In reflecting on the step by step process and insights on managing challenges through strategic targeting, Egesah and Wahome reframe tracer studies as necessary for credibility and accountability to a range of stakeholders and society.

Sharing Promising Practices

Khamis and Chapman reflect on the barriers and facilitators to an innovative faculty mentoring initiative across sites and borders. The effort clearly templated the pathway to transformational relationships and learning that are achievable through quality partnerships and shared agendas.

Khamis, Dhamani and Petrucka present the genesis of the Aga Khan University's Network of Quality Assurance and Improvement with a focus on self-assessment informed by the Inter-University Council for East Africa's process harmonisation. Allocation of resources (time, human) and a vision for quality leaders and learners as well as professional and market relevance were seen as foundational and ensured ownership in the efforts. The co-incidence of this process with the creation of a Quality Assurance Directorate messaged a leadership and institutional commitment to a quality framework.

Finally, Dhamani, Kanji, and Petrucka reflect on the often embattled evaluation approach of Multiple Choice Questions and align these with cognitive domain assessment. Not only do they reinvigorate and give credibility to the often maligned MCQ approach, they provide an exemplar of how to move forward on a continuing professional development approach to ensure capacities and quality assurance in the creation and utilization of MCQs in assessing learning outcomes.

Launching the Dialogue

With this background and mindset, your reading journey into the complex navigation of quality assurance in East Africa is launched. The contributions are representative of a range of changes taken in the voyage: storms and norms encountered; and, most importantly, successful maiden voyages.

Why Measurement Matters: The Learning Outcomes Approach – A Case Study from Canada[1]

Sarah Brumwell*, Fiona Deller** & Alexandra MacFarlane***

Abstract

Learning outcomes assessment can be a valuable tool for improving educational quality and institutional accountability. When learning outcomes, learning experiences and assessment tasks are aligned, the learning outcomes approach can ground quality assurance and teaching, and learning improvements in direct evidence of student learning. We offer our experiences as an informal case study on the use and development of learning outcomes assessment for quality assurance purposes. Since assessment is the keystone of the learning outcomes approach, our reflections are more broadly driven by the question of how best to measure and demonstrate student learning. This question takes on challenging new dimensions when we consider the fact that the *evidence* collected through the assessment of learning outcomes must be sound enough to support multiple policy goals.

Résumé

L'évaluation des résultats d'apprentissage peut être un outil précieux pour l'amélioration de la qualité de l'enseignement et la redevabilité institutionnelle. Lorsque les résultats d'apprentissage, les expériences d'apprentissage et les tâches d'évaluation sont alignés, l'approche basée sur les résultats d'apprentissage peut constituer la base de l'assurance et l'enseignement de qualité, et les améliorations de l'apprentissage en évidence directe de l'apprentissage des étudiants. Nous proposons nos expériences en tant qu'étude de cas informelle sur l'utilisation et

*   Higher Education Quality Council of Ontario (HEQCO), Toronto, Canada.
     Email: sbrumwell@heqco.ca
**   Higher Education Quality Council of Ontario (HEQCO), Toronto, Canada.
     Email: fdeller@heqco.ca
*** Higher Education Quality Council of Ontario (HEQCO), Toronto, Canada.
     Email: amacfarlane@heqco.ca

le développement de l'évaluation des résultats d'apprentissage pour les besoins de l'assurance qualité. L'évaluation étant la clé de voûte de l'approche basée sur les résultats d'apprentissage, nos réflexions sont plus largement guidées par la question de comment mesurer et démontrer au mieux l'apprentissage des étudiants. Cette question prend de nouvelles dimensions exigeantes lorsque nous considérons le fait que la preuve recueillie par le biais de l'évaluation des résultats d'apprentissage doit être suffisamment solide pour prendre en charge des objectifs stratégiques multiples.

Introduction

Learning outcomes are broad, yet direct statements describing what students should know and be able to do at the end of a course or programme (Kenny 2011). Many countries have adopted various forms of learning outcomes and adapted them to suit a variety of educational and policy needs. In Canada, learning outcomes have long formed the backbone of our quality assurance and credentialing frameworks, though we have only recently begun to validate and enhance those outcomes through the assessment of student learning (Deller, Brumwell and Macfarlane 2015). In the European Union, the Bologna Process' Tuning Project (Bologna Follow Up Group on Qualifications Frameworks 2005) has used learning outcomes as the basis of a 'common language of student success'. This common language has made it possible to align postsecondary programmes throughout EU member states and neighbouring countries, improve quality assurance processes and open new educational pathways for European students (Kennedy *et al.* 2006; González and Wagenaar 2008). This ability to 'multitask' has made learning outcomes very appealing to postsecondary policy makers, leadership and instructors around the world. Yet it is important to remember that the learning outcomes approach is not a panacea, but a tool. As with most tools, it is most effective when it is used knowledgeably and skilfully. When it comes to learning outcomes, 'effective use' requires assessment.

The Higher Education Quality Council of Ontario (HEQCO) is at the forefront of learning outcomes assessment in Canada. As an arm's-length agency of the provincial government, we conduct research and provide evidence-based recommendations towards the continued improvement of postsecondary education (PSE) policy and practice. Three core issues drive our research programme: 1) access to PSE for historically under-represented students; 2) system design; and 3) learning quality. This latter priority directs our work on learning outcomes assessments as a means of assuring quality and improving student learning. Though our analyses and recommendations typically focus on Canadian contexts, our research, publications, conferences, and webinars

reach a global audience. In recent years we have also forged connections with the PSE community in East Africa by means of our partnership with the Aga Khan University on the development of learning outcomes assessment initiatives.

Given our mutual interest in improved accountability mechanisms and the enhanced experience of student learning, we offer our experiences as an informal case study on the use and development of learning outcomes assessment for quality assurance purposes. The learning outcomes approach described here is, by necessity, an iterative process as our institutions resist policies that they perceive to be demanding uniformity. Like many African institutions, our colleges and universities do not appreciate quality assurance requirements that are imposed from afar and out of touch with their unique culture of teaching and learning. Our process has developed in light of these concerns, with the understanding that each institution needs to adapt and customise the learning outcomes approach in order for it to be truly effective. This article illustrates how learning outcomes can serve as the basis of postsecondary quality assurance activities that are flexible enough to work with and showcase institutional individuality.

This article is an adaptation of Fiona Deller's keynote address to the East African Higher Education Quality Assurance Network's 2015 conference in Nairobi. The article begins with a review of the crucial role assessment plays in the learning outcomes approach. The article then explores the HEQCO's four categories for interpreting and organising learning outcomes, with a focus on how this typology can be used to identify areas where assessment is needed to demonstrate student learning. Since assessment is the keystone of the learning outcomes approach, our reflections are more broadly driven by the question of how best to measure and demonstrate student learning. This question takes on challenging new dimensions when we consider the fact that the evidence collected through the assessment of learning outcomes must be sound enough to support multiple policy goals. The article concludes with a short discussion of the 'ripple effects' that learning outcomes assessment can offer to all levels and operations of postsecondary education, from student engagement through to quality assurance.

Why Assess Learning Outcomes?

Learning outcomes can demonstrate the value of postsecondary credentials in terms of student learning. In many jurisdictions, including Ontario, credential frameworks already describe the degree to which graduates at each credential level are expected to have mastered certain skills and competencies (Council of Ontario Universities (COU) 2011; Deller *et al.* 2015; Lumina Foundation 2014). At the course and programme levels, courses can be designed so that

'learning outcomes, learning experiences, and assessment tasks cohere internally and build towards program outcomes', using a model also known as constructive alignment (Goff *et al.* 2015:8). Colleges and universities also use learning outcomes to set institution-wide goals for student learning. When all of these tiers of outcomes align, the postsecondary sector gains a great deal of clarity and focus. However, unless learning outcomes are assessed, there are few other gains to be had in their implementation. This is because assessment makes learning outcomes meaningful by grounding them in empirical data. That is, assessment can provide evidence of student learning, which can then be used to inform broader programme-level, institutional, and policy concerns.

The need for evidence of student learning is becoming ever more critical to postsecondary education (PSE) systems around the world. As many governments are reducing expenditures in order to weather the tough economic climate, institutional accountability is at a premium. As the cost of PSE rises, student debt loads increase, and entry-level jobs grow harder to secure, students and stakeholders are beginning to question whether PSE delivers a viable return on investment. As more and more individuals obtain postsecondary credentials, institutions and employers are increasingly looking beyond attainment rates to consider other ways of determining and demonstrating the effectiveness of PSE. It is against this backdrop that the learning outcomes approach is gaining traction as a means of ensuring that our postsecondary systems are accountable, accessible and of the highest quality. The effectiveness of learning outcomes, however, depends upon assessment. Learning outcomes assessment can provide us with the empirical evidence needed to inform change and growth in the postsecondary sector.

When assessment is supported by a well-articulated learning outcomes framework, it can enrich a postsecondary institution in many ways. For example,

- When outcomes are assessed at the course or programme level, the data can be used to ground *quality assurance***,** *programme evaluation* and *teaching and learning improvements* in evidence of student learning.
- At the same time, instructors can create a *formative learning* experience for students by using the data to identify strengths and areas needing further support.
- When students are assessed upon entering PSE and prior to graduation, institutions can demonstrate value added – a significant contribution to *institutional accountability*.
- Assessment data can be used to improve *student mobility* by verifying that students are prepared to pursue graduate or professional education and, eventually, the labour market.

In other words, learning outcomes frameworks and assessments provide us with a common language for articulating student success and educational quality. In this way, assessment offers some much-needed weight and clarity to PSE.

While the incentives to assess learning outcomes are sound, the road ahead is far from clear. In recent years, learning outcomes have spread rapidly across the postsecondary sector. In fact, the expanded presence of learning outcomes at the postsecondary level has outstripped our abilities to validate those outcomes through assessment, both in terms of the quantity and diversity of outcomes and the comparability of the language used. The reality is that learning outcomes assessment tends to be treated as an afterthought. Often it is not given much serious attention until the majority of the outcome development and mapping work has been completed. Additionally, not all institutions use the same terminology to articulate skills and competencies, which affects the extent to which outcomes can be compared and interpreted reliably. With this in mind, efforts on learning outcomes assessment need to be accelerated before the learning outcomes approach as a whole can begin to bear fruit.

The HEQCO's response to these circumstances has been structured around a typology including four different classes of postsecondary learning outcome appropriate to the Ontario contexts: *basic cognitive skills*, *discipline-specific skills*, *higher-order cognitive skills* and *transferable skills*. Together, these categories can be used to guide postsecondary outcomes assessment and, in doing so, create a shared foundation for postsecondary learning quality. The next section of this paper reviews the four categories and brings into greater focus the different assessment and policy considerations for each domain.

Learning Outcomes Assessment and the Four Domains

The HEQCO's four domains of learning outcomes represent the types of learning outcomes most commonly employed in PSE. The typology was developed to help bridge the gap in the language used to describe the skills expected of postsecondary students. Each domain operates as a 'catch-all' that can be used to sort and make sense of the overgrowth of learning outcomes in use today, with the goals of establishing the common ground and common language necessary for valid assessment. The typology was first proposed by Weingarten (13 February 2014) and outlines four classes of learning outcomes:

1. basic cognitive skills, such as literacy and numeracy;
2. disciplinary content, referring to the knowledge and content students are expected to have acquired in their field of study;
3. higher-order cognitive skills, such as problem solving and critical thinking; and

4. transferable life skills, sometimes called 'soft skills' or 'essential skills' and including behavioural and personality attributes such as initiative, resilience, and time management.

During the course of our work in this field, we have acknowledged that considerable overlap can and does exist between these areas. However, we have also been able to establish the ways in which the domains – whether studied individually or collectively – can be used to refine and target assessment efforts. This section takes a closer look at each category in terms of measurement considerations and possible applications of assessment data.

Basic Cognitive Learning Outcomes

Basic cognitive skills include literacy and numeracy (Weingarten 13 February 2014). These basic literacy and numeracy skills make up the foundation of every level of education and, in recent years, have been restructured around learning outcomes in many countries. On the one hand, the Organisation for Economic Co-operation and Development (OECD) has correlated literacy and numeracy proficiency with increased labour market participation and higher wages, highlighting the clear benefits of well-developed basic cognitive skills (OECD 2013). On the other hand, literacy and numeracy skills are a point of perennial concern in Canada, as OECD assessments of Canadians' skill levels show no real improvement over the last twenty years (Dion and Maldonado 2013).

Though literacy and numeracy make up a significant part of the K-12 curriculum, basic cognitive outcomes are also important in PSE, as these skills are foundational to more complex study as well as to employability. At the elementary and secondary levels, literacy and numeracy are measured against provincial curriculum standards for each grade. There are no comparable standards in PSE and the definitions and assessments used by individual institutions vary considerably. While Ontario's colleges and universities are committed to producing literate and numerate graduates, the current approach to teaching and assessing basic cognitive outcomes is unsystematic.

The identification of basic cognitive skills requires that we distinguish foundational skills from associated, though more abstract, higher-order cognitive outcomes. In other words, it is not always easy to determine where literacy and numeracy end and more specialised communication and mathematical skills begin. Despite the difficulties it presents, this distinction is essential to designing meaningful, appropriate outcomes assessments at the postsecondary level. As students enter PSE with a broad range of skill sets and abilities, it is increasingly clear that postsecondary institutions need to establish a baseline level of competency for basic cognitive outcomes and assess these skills upon admission to ensure that students possess a strong

base of literacy and numeracy skills upon which more complex skills can be built (Dion and Maldonado 2013).

The conceptualisation of basic cognitive learning outcomes presents a number of other challenges. One concerns the lack of conceptual clarity around literacy and numeracy, which affects the extent to which we can measure these skills effectively. Another concerns the lack of clarity in postsecondary policy around the foundational importance of basic cognitive outcomes for higher learning. While individual postsecondary institutions use a variety of definitions and assessment tools to measure literacy and numeracy skills, there is still confusion about the importance and value of basic cognitive outcomes for all students in all disciplines in any course of postsecondary study.

Fortunately, international assessments, such as the OECD's Programme for International Student Assessment (PISA) and Programme for the International Assessment of Adult Competencies (PIAAC), help to make up for some of the inconsistencies present in outcomes assessment at the institutional level. PISA and PIAAC generate massive data sets through common indicators, such that the information collected can be used to evaluate the health of education systems and inform policy directions. These assessment programmes are motivated in part by the evidence linking basic cognitive proficiency to improved economic standing, as well as the 'need to align higher education outcomes in key areas across borders in a time of growing graduate mobility' (Ewell 2012:37).

International assessments face challenges with regard to the relevance of the tests to participants and the usefulness of the data collected. Since international assessment data are intended for high-level analysis and planning, individual scores are not normally made available to participants. It is also difficult to measure and compare student outcomes across regions that do not necessarily have the same educational and technological infrastructure. Even given these methodological concerns, international assessments reliably produce one important effect: with every reporting cycle, these measurements return literacy and numeracy to the forefront of the national conversation about education.

Strong literacy and numeracy skills have been linked to many positive outcomes in life, including increased wages and labour market participation. Despite this, more work needs to be done at the postsecondary level to conceptualise literacy and numeracy as skills in their own right rather than as 'background' skills implicit in higher-level disciplinary work. This lack of focus is facilitated by the unclear position allocated to basic cognitive skills in policy frameworks.

Those who do wish to assess basic cognitive skills at the postsecondary level will find a number of reliable tools at their disposal, especially for the assessment of students entering a course of study. Fewer tools are available to measure the added value of PSE to these skills.

Discipline-specific Learning Outcomes

Basic cognitive learning outcomes address the skills students need in order to process complex information and develop specialised skills. This learning, which has traditionally been the focus of PSE, can be broken down further into a range of discipline-specific learning outcomes. Discipline-specific outcomes determine whether or not a student has acquired the particular abilities required for success in their chosen field of study. Although many discipline-specific outcomes have long histories, there is still much debate about how they should be assessed.

Discipline-specific learning outcomes are stated most explicitly in professional programmes, such as engineering and medicine, where accreditation standards exist and mirror these outcomes (Tamburri 2013). This type of outcome also surfaces in non-professional programmes that clearly align with specific careers or sectors. In these instances, discipline-specific outcomes are often informed by jurisdictional accrediting bodies, partner institutions, and/or programme advisory committees representing relevant employers. Although accreditors have traditionally been concerned with improving curricula and pedagogy, there has been a recent shift towards using quality assurance frameworks to ensure that professional standards are being met (Ewell 2009). External stakeholders and employers in particular want evidence that graduates are equipped to join their respective professions. Regular assessment programmes for discipline-specific learning outcomes can help to maintain stakeholder confidence in the quality of professional training programmes.

While discipline-specific outcomes can improve the structure and coherence of a programme, their external functions are not limited to defining career pathways. Discipline-specific outcomes are increasingly common in non-professional university programmes, as a means to clarify programme structure and ensure educational quality. An additional purpose for this domain has arisen from the increase in international student mobility, as institutions are placing greater emphasis on credit transfer. Discipline-specific outcomes have emerged as a means of recognising learning across jurisdictions, and as North American institutions look to attract foreign students, many colleges and universities have adopted discipline-specific learning outcomes as a means of remaining competitive with the world's leading institutions (Tamburri 2013). In this context, learning outcomes are fast replacing credit hours as the preferred unit of measurement for learning.

The European Union's Tuning Project has had considerable impact on the global interest in discipline-specific learning outcomes. The project emerged in the wake of the Bologna Accord in 1999 as a means of ensuring the mobility

of credentials and the consistency of quality standards across EU countries. Learning outcomes developed by the Tuning process can be mapped through all levels of a programme or credential, ensuring alignment, accountability and clear direction for curriculum development (Lennon *et al.* 2014; Tuning Educational Structures USA 2014). The Tuning process, which involves gathering advice from subject matter and policy experts, has since been exported successfully to postsecondary systems in Latin America (2005), US (2009), Russia (2011), Africa (2011), Australia (pilot study 2010) and Canada (2011) (Beneitone *et al.* 2007; Institute for Evidence-Based Change 2012; Tuning Russia 2013; Yopp and Marshall 2014). Tuning Africa, in particular, entered its second phase in 2015 and has expanded its focus to additional disciplines and degrees as well as matters relating to credit transfer and sector management (What is Tuning Africa? 2016).

To the extent that they are mirrored in accreditation standards, discipline-specific learning outcomes create clear pathways from PSE to the labour market in professional disciplines. Through initiatives, such as the Tuning process, many institutions are using discipline-specific outcomes to provide quality assurance, improve student mobility and smooth transitions into the workforce. The unique structure of discipline-specific outcomes raises questions for assessment with regard to whether quality assurance and student achievement can be measured at the same time, and whether it is appropriate to assess discipline-specific outcomes in a generic context (Barrie, *et al.* 2014; Brooks 2011; Christodoulou 2014; Heiland and Rosenthal 2011). However, PSE's protracted focus on discipline-specific learning outcomes gives this domain a level of clarity that the other categories of learning outcomes and higher-order cognitive outcomes, in particular, are not afforded.

Higher-order Cognitive Learning Outcomes

Higher-order cognitive skills include critical thinking, problem solving and communication (Weingarten 13 February 2014). Employers have been vocal about the need to teach students how to analyse complex information, make credible judgements and arrive at effective solutions; these abilities are highly valued in almost every line of work (Benjamin2013; Borwein 2014; Canadian Council of Chief Executives 2014). In PSE, the drive to advance higher-order cognitive outcomes comes from professional and less career-specific programmes alike. Highly discipline-specific programmes such as engineering recognise the need for future professionals to be able to make sound, responsible decisions, while general arts and science programmes view higher-cognitive outcomes as skills that can help graduates transition into a variety of careers (Kaupp, Frank and Chen 2014; Wabash National Study of Liberal Arts Education 2009).

Although the learning outcomes approach helps educators and students identify and develop higher-order cognitive skills, critical thinking, problem solving and communication are often considered to be among the most difficult outcomes to define, teach and assess.

Most credential frameworks and degree profiles ascribe great importance to higher-order cognitive outcomes, though there is little consistency in how these outcomes are framed and described. It is common, for instance, for qualifications frameworks adapted from the European Union's *Dublin Descriptors* to embed skills in critical-thinking, communication and problem-solving across various competency areas and credential levels (Bologna Follow Up Group on Qualifications Frameworks 2005; Council of Ministers of Education, Canada 2007; Quality Assurance Agency 2008; Ontario Ministry of Training, Colleges, and Universities 2009; Council of Ontario Universities 2011). No operational definitions are provided for these skills. Instead, the content and value of these outcomes are indirectly conveyed by the competency areas. These point to a much broader trend in the higher-order cognitive domain: stakeholders recognise the value of critical-thinking, problem-solving and communication skills, but there is no consensus on how to conceptualise them, much less how to assess them.

The challenge we face here is the opposite of the situation with respect to basic cognitive outcomes. Basic cognitive outcomes appear to be undervalued in PSE, though educators understand quite well how to teach and assess literacy and numeracy skills. In contrast, higher-order cognitive outcomes are highly valued, but we lack agreement on definitions. Both sets of circumstances produce similar effects: institutions respond to these grey areas by developing their own concepts and interventions for assessment, but these are difficult to translate across contexts, which, in turn, can affect the quality and cohesion of PSE within the sector as a whole.

Although we identify critical-thinking, problem-solving and communication skills as distinct higher-order outcomes, the differences between them are unclear. For example, as we noted earlier, literacy as a basic cognitive skill and communication as a higher-order skill can be challenging to differentiate. Critical thinking, meanwhile, is difficult to define clearly and to link to demonstrable behaviours. One option has been to understand problem-solving and communication skills as components of critical thinking, essentially as tools one uses to resolve situations or convince others that one's argument is sound (Benjamin 2013). Another possible solution may lie in the multi-dimensional working definition created by the Education Testing Service, which identifies analytical, synthetic and causal dimensions of critical thinking that are clear enough to ground assessment tasks (Liu, Frankel and Roohr Crotts 2014). These

arguments have failed to convince everyone, hence critical thinking remains a vague concept. This gap perpetuates difficulties uptake and use of learning outcomes assessments and frameworks, because institutions and programmes interpret critical thinking a number of different ways. Since one goal of the learning outcomes approach is to create a common language of skills and abilities linked to demonstrable outcomes, critical-thinking and other higher-order cognitive skills pose a particular challenge.

A number of measurements approach higher-order cognitive outcomes through problem-solving and communication skills, since the definition of critical thinking is much disputed. The Collegiate Learning Assessment (CLA+), for instance, calculates critical-thinking scores based on the quality of analytic reasoning, problem-solving and communication skills reflected in participants' written responses to case-based tasks (Benjamin 2013). Even so, others have contested that this holistic approach fails to account for other components of critical thinking, such as informal logic (Possin 2013). While critical thinking may remain a vague concept, we do know that students can be taught component skills like analytic reading, dissecting arguments, differentiating between deductive and inductive reasoning, and so forth. The challenge for assessment lies in striking the right balance between known factors and other less well-defined components.

The CLA+ is one of the better-known critical-thinking assessments on the market today. The CLA+ uses open-ended, case-based written assessment tasks to measure how well students 'formulate hypotheses, recognize fallacious reasoning, and identify implicit and possibly incorrect assumptions' (Benjamin 2013:3). In doing so, the CLA+ eschews the multiple-choice format usually preferred by commercially available standardised tests because, according to the creators of the instrument, students do not necessarily have to exercise their critical-thinking capacities to choose between a set of possible answers (Benjamin 2013). Instead, the CLA+'s open-ended format provides students with a short case study that mirrors complex, real-world problems. Since students are given all of the information they need to analyse the case, and the tasks are presented in a variety of contexts, the CLA+ claims to measure the communication and problem-solving skills regardless of discipline (Benjamin 2013).

However, it has been argued that the CLA+'s lack of discipline-specific context ignores the extent to which prior subject-area knowledge and problem-solving experience factor into a student's critical thinking process (Banta and Pike 2012). This may cause students from some programmes, especially those in which critical thinking is taught through simulations, case studies, and problem-based learning, to underperform on what is primarily an exercise in close reading and written analysis. Additionally, others have suggested that the

CLA+'s emphasis on a holistic conception of critical thinking overlooks the significance of informal logic and critical-thinking strategies (Possin 2013). This criticism is levelled primarily at the validity of the CLA+'s assessment scores rather than at the test itself, since the CLA+ implicitly includes these skill components. The implication of this oversight, however, is significant: since components of critical thinking are not included in the scoring matrix, the CLA+ may be a better measure of rhetorical skills than of critical thinking proper.

Since critical thinking is such a vague concept, we focus on those instruments that measure it indirectly through problem-solving and communication skills. But as our discussion of the CLA+ illustrates, it is difficult for assessment measures to account for students' disciplinary knowledge base and frames of reference. Rubrics like those in the Association of American Colleges and Universities (AAC & U) VALUE initiative have been better able to grapple with the overlap of higher-order cognitive skills and disciplinary knowledge, but because they rely primarily on the judgement of instructors, they can be unreliable when applied to large samples (AAC & U 2014). Since much of critical thinking occurs invisibly or without clear links to discrete and observable behaviours, problem-solving, communication and analytical skills (such as informal logic) still seem to be the most promising roads to access the teaching and assessment of higher-order cognitive outcomes.

Transferable Skills Learning Outcomes

Transferable skills are 'prime qualities that make and keep us employable' (Goleman 1998:4). These outcomes can help students succeed not only academically but professionally and personally as well (Weingarten 2014). 'Transferable' reflects the fact that these skills are thought to be generic and applicable across a range of activities, though transfer is not necessarily automatic and adaptation may be required (Jackson 2013). Students need to understand how and when transferable skills can be used to their advantage, both within their fields of study and on the labour market.

Stakeholders sometimes equate transferable skills with graduate employability, which presupposes that the generic nature of such skills makes them valuable and applicable in any professional context. However, some researchers argue that this equation neglects to take learning transfer into account as a distinct stage in the skills development process (Cameron *et al.* 2011; Jackson 2013). Many of the key premises of learning transfer can be used to illuminate the nature of transferable skills and learning outcomes. Specifically, questions of metacognition – how and why we think and act the ways in which we do – can help explain the 'how' and 'when' of learning and skills transfer.

Metacognition refers to 'the mind's ability to reflect on how effectively it is handling the learning process' (Conley 2013), the ability to ;stop and think' or 'step back and reflect' (Behar-Horenstein and Niu 2011). These descriptions position metacognition at the heart of the higher-order cognitive processes. Our problem-solving and communication activities are functions of our ability to think critically and ask questions *– that is, our capacity for metacognition. But metacognition is also central to transferable skills, which are essentially tools and techniques that we use to navigate between and engage with various situations (Conley 2013). Our ability to transfer learning is what sets the basic cognitive, discipline-specific and higher-order cognitive domains in motion.

Transferable skills help us to leverage our learning and frames of reference to apply our skills in unfamiliar contexts. When employers look for flexibility, resourcefulness and adaptability, they are naming transferable outcomes that can ease the transition from school to work. Yet these qualities are far from simple to teach and assess. Transferable outcomes depend as much on personality as on curriculum. Just as some students might display a knack for mathematics while others might require additional supports, some students are naturally inclined to work well in teams while others need to develop this skill.

While the postsecondary sector is only beginning to turn its attention to transferable skills, employers have been vocal about their importance for some time. When surveyed, it appeared that Canadian employers have repeatedly prioritised interpersonal, communication and problem-solving skills over aspects like industry-specific knowledge, time management and computer skills (Canadian Council of Chief Executives 2014; Refling and Borwein 2014). Most recently, an 11-person panel of Canadian economists and PSE experts was asked to study developing trends in skills training for science, technology, engineering and mathematics (STEM). This field has long been considered to be an area in need of highly-skilled professionals, so its conclusion that 'in an uncertain future, a premium will be put on workers' adaptability' was unprecedented (Expert Panel on STEM Skills for the Future 2015:162). Yet even in STEM, employers, experts and educators are growing ever more aware of the value of transferable skills, particularly to prepare students to be able to change course should the need arise.

This makes the need for further research into the teaching and assessment of transferable skills all the more urgent. Some promising tactics are appearing, such as case studies, problem-based learning and situational judgement tests, but we still have very few validated tools capable of collecting useful data (Jackson 2013; Hoidnand Kärkkäinen 2014). The postsecondary sector, moreover, has yet to demonstrate interest in developing and measuring

transferable skills outcomes (Weingarten 13 February 2014). Still, these skills are just as valuable to postsecondary students as they are to early learners, with pre-school and school readiness programmes in Canada having long used measures such as the Early Development Index to help children with diverse needs successfully transition to kindergarten. Ontario's K-12 sector is also beginning to recognise the importance of transferable skills for student success; in February 2014, People for Education (2014) launched Measuring what Matters, a multi-year initiative developing educational outcomes for creativity, citizenship, health, quality learning environments and social-emotional skills. As such, PSE may be able to expand on the work of the early childhood and K-12 education sectors to develop and assess transferable skills outcomes.

Basic cognitive and disciplinary outcomes allow students to navigate the world, while higher-order cognitive outcomes allow them to engage it critically. Transferable skills outcomes, however, transcend language and discipline. These capacities help us adapt our learning to different situations and thus carry it from the classroom to the labour market and beyond. While we know little about how to teach and assess transferable skills at the postsecondary level, we understand some of the underlying phenomena – learning transfer, creativity and resilience. We also know that we begin developing these skills early in life, so we can look to the ways transferable outcomes are assessed in early learning, elementary school and secondary school as we develop measures that are appropriate for PSE. As interest in transferable skills builds, research will gain the momentum to follow.

Conclusion

Learning outcomes assessment can be a valuable tool for improving educational quality and institutional accountability. When learning outcomes, learning experiences and assessment tasks are aligned, the learning outcomes approach can ground quality assurance and teaching and learning improvements as direct evidence of student learning.

At this point in time, enthusiasm for the learning outcomes approach has outstripped our abilities to assess student skills reliably. To this end, the HEQCO has created a four-part typology of learning outcomes that can be used to identify common language and common ground for assessment. While this process has been developed with the needs of Ontario's postsecondary system in mind, it depends, not unlike the Tuning methodology, on institutions and faculty members defining for themselves what educational quality looks like. It can also be adapted and applied in other postsecondary

cultures to clarify and focus assessment efforts. We believe the flexibility of our approach may be especially useful to the postsecondary community in East Africa, as it can be tailored to suit the needs of a rapidly growing sector and of low resource/high demand institutions.

As we have indicated, the learning outcomes approach is not without its growing pains. Assessment, in particular, even with the help of our typology, can be difficult to navigate. Although literacy and numeracy – basic cognitive skills – are known to effect positive outcomes across one's lifetime, PSE tends to view them as background skills implicit in higher-level disciplinary studies. Discipline-specific skills benefit from clarity of focus not offered to the other domains, and yet the question of how to balance these outcomes with basic cognitive, higher-order cognitive and transferable skills is still a point of contention. Higher-order cognitive skills are valued by government, institutions and employers alike, but they resist our best efforts to define and measure them. Transferable skills hold great potential for easing students across postsecondary transitions, but PSE is only beginning to look at how early childhood and K-12 educators are already assessing these skills.

With all of these grey areas, good leadership is crucial to fostering the learning outcomes approach and an institutional culture of assessment. As instructors and the faculty are students' primary points of contact within a postsecondary institution, their engagement is key. Senior leadership needs to support assessment as well as mapping activities, so that the faculty can understand just how valuable their assessment data is to the continued health of the college or university.

If implemented properly, the learning outcomes approach can serve the purposes both of accountability and quality measurement. However, it is not enough to revise policy infrastructure and map outcomes across credentials. In order for a system to be truly outcomes-based, we need to prove that students are graduating with the skills they need to succeed. Assessment remains the keystone of the learning outcomes approach at the postsecondary level, though it is not always taken seriously. If given proper consideration, learning outcomes assessment could be an invaluable source of strength and flexibility for a system in transition.

Note

1. This article is an adaptation of Fiona Deller's keynote presentation to the East African Higher Education Quality Assurance Network's 2015 conference in Nairobi, Kenya.

References

Association of American Colleges and Universities, 2014, *AAC&U VALUE Rubric Development Project*. (http://www.aacu.org/value/rubrics/).

Banta, T., and Pike, G., 2012, 'Making the case against – one more time', in P. Ewell, and R. Benjamin, eds, *The Seven Red Herrings about Standardized Assessments in Higher Education*, pp. 24–30, NILOA Occasional Paper #15, Champaign, IL National Institute for Learning Outcomes Assessment.

Barrie, S., Hughes, C., Crisp, G., and Bennison, A., 2014, *Assessing and Assuring Australian Graduate Learning Outcomes: Principles and Practices within and across Disciplines*, Sydney: Office for Learning and Teaching.

Behar-Horenstein, L., and Niu, L., 2011, 'Teaching critical thinking skills in higher education: a review of the literature', *Journal of College Teaching and Learning*, Vol. 8, No. 2, pp. 25–42.

Beneitone, P., Esquetini, C., González, J., Maletá, M. M., Siufi, G., and Wagenaar, R.,eds, 2007, *Reflections on and outlook for Higher Education in Latin America: Final Report of the Tuning Latin America Project, 2004–2007*. (http://tuning.unideusto.org/tuningal/index.php). 30 May 2014.

Benjamin, R., 2013, *Three Principle Questions about Critical-Thinking Tests*, New York: Council for Aid to Education.

Bologna Follow Up Group on Qualifications Frameworks, 2005, *A Framework for Qualifications of the European Higher Education Area*, Copenhagen, Denmark: Ministry of Science, Technology and Innovation.

Borwein, S., 2014, *The Great Skills Divide: A Review of the Literature*, Toronto: Higher Education Quality Council of Ontario.

Brooks, R., 2011, 'Making the case for discipline-based assessment', in D. Heiland, and L. J. Rosenthal, eds, *Literary Study, Measurement, and the Sublime: Disciplinary Assessment*, pp. 47–57, New York: The Teagle Foundation.

Cameron, M., Hipkins, R., Lander, J., and Whatman, J., 2011, *The Transfer of Literacy, Language and Numeracy Skills from Learning Programs into the Workplace: Literature Review*, Wellington: New Zealand Department of Labour and New Zealand Council for Educational Research.

Canadian Council of Chief Executives, 2014, *Preliminary Survey Report: The Skills Needs of Major Canadian Employers*, Ottawa: Canadian Council of Chief Executives. (http://www.ceocouncil.ca/skills).16 January 2015.

Christodoulou, D., 2014, 'Minding the knowledge gap: the importance of content in student learning', *American Educator*, Spring, pp. 27–33.

Conley, D.T., 2013, January 22, 'Rethinking the notion of "non cognitive"', *Education Week*. Available online at http://www.edweek.org. Accessed on 17 November 2014.

Council of Ministers of Education, Canada, 2007, *Ministerial Statement on Quality Assurance of Degree Education in Canada*, Toronto: Author.

Council of Ontario Universities, 2011, *Ensuring the Value of University Degrees in Ontario*, Toronto: Author.

Deller, F., Brumwell, S,. and MacFarlane, A., 2015, *The Language of Learning Outcomes: Definitions and Assessments*, Toronto: Higher Education Quality Council of Ontario.

(http://www.heqco.ca/en-ca/Research/ResPub/Pages/The-Language-of-Learning-Outcomes-Definitions-and-Assessments-.aspx).8 July 2016.

Dion, N., and Maldonado, V., 2013, *Making the Grade? Troubling Trends in Postsecondary Student Literacy*, Toronto: Higher Education Quality Council of Ontario.

Ewell, P., 2009, *Assessment, Accountability, and Improvement: Revisiting the Tension*, NILOA Occasional Paper #1,Champaign, IL: National Institute for Learning Outcomes Assessment.

Ewell, P., 2012, 'A world of assessment: OECD's AHELO initiative', *Change: The Magazine of Higher Learning*, September/October 2012, pp. 33–42.

Expert Panel on STEM Skills for the Future, 2015, *Some Assembly Required: STEM Skills and Canada's Economic Productivity*, Ottawa: Council of Canadian Academies. Available online at http://www.scienceadvice.ca/uploads/ENG/AssessmentsPublicationsNewsReleases/STEM/STEMFullReportEn.pdf.Accessed on 7 April 2014.

Goff, L., Potter, M., Pierre, E., Carey, T., Gullage, A., Kustra, E., Lee, R., Lopes, V., Marshall, L., Martin, L., Raffoul, J., Siddiqui, A., and Van Gastel, G., 2015, *Learning Outcomes Assessment: A Practitioner's Handbook*, Toronto: Higher Education Quality Council of Ontario.

Goleman, D., 1998,*Working with Emotional Intelligence,* New York: Bantam Dell.

González, J., and Wagenaar, R., eds, 2008, *Universities' Contribution to the Bologna Process: An Introduction*, 2nd ed., Bilbao, Spain: Publicaciones de la Universidad de Deusto and The Tuning Project.

Heiland, D., and Rosenthal, L. (2011). *Literary Study, Measurement, and the Sublime: Disciplinary Assessment*. New York: The Teagle Foundation.

Hoidn, S., and Kärkkäinen, K., 2014, *Promoting Skills for Innovation in Higher Education: A Literature Review on the Effectiveness of Problem-based Learning and of Teaching Behaviours*, OECD Education Working Papers #100. Available online at http://dx.doi.org/10.1787/5k3tsj67l226-en. Accessed on 4 October 2014.

Institute for Evidence-Based Change, 2012, 'Tuning American higher education: the process', *Tuning USA*. Available online at http://tuningusa.org/TuningUSA/tuningusa.publicwebsite/c5/c58681b6-801e-49e1-bf55-4ff29e1b800b.pdf.Accessed on 11 October 2014.

Jackson, D., 2013, 'Business graduate employability – where are we going wrong?', *Higher Education Research and Development*, Vol. 32, No.5, pp. 776–790.

Kaupp, J., Frank, B., and Chen, A., 2014, *Evaluating Critical Thinking and Problem Solving in Large Classes: Model Eliciting Activities for Critical Thinking Development*, Toronto: Higher Education Quality Council of Ontario.

Kennedy, D., Hyland, A., and Ryan, N., 2006, 'Writing and Using Learning Outcomes: A Practical Guide', *Journal of the European Higher Education Area,* In *Implementing Bologna in your institution*, C 3.4-1, 1–30. Available online at http://sss.dcu.ie/afi/docs/bologna/writing_and_using_learning_outcomes.pdf. Accessed on 10 January 2015.

Kenny, N., 2011, 'Program-level learning outcomes', University of Guelph: Teaching Support Services. Available online at http://www.uoguelph.ca/vpacademic/avpa/outcomes/. Accessed on 8 May 2014.

Lennon, M. C., Frank, B., Humphreys, J., Lenton, R., Madsen, K., Omri, A., and Turner, R., 2014, *Tuning: Identifying and Measuring Sector-Based Learning Outcomes in Postsecondary Education*, Toronto: Higher Education Quality Council of Ontario.

Liu, O., Frankel, L., and RoohrCrotts, K., 2014, *Assessing Critical Thinking in Higher Education: Current State and Directions for Next-Generation Assessment*, Educational Testing Service Research Reports (ETS RR-14-10).

Lumina Foundation, 2011, *The Degree Qualification Profile*, Indianapolis, IN Lumina Foundation.

Ontario Ministry of Training, Colleges and Universities, 2009, *Ontario Qualifications Framework*. Available online at http://www.tcu.gov.on.ca/pepg/programs/oqf/. Accessed on 14 October 2014.

Organisation for Economic Co-operation and Development, 2013, *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, Paris: OECD Publishing. Available online at http://dx.doi.org/10.1787/9789264204256-en. Accessed on 8 May 2014.

People for Education, 2014, *Broader Measures of Success: Measuring What Matters in Education*, Toronto: People for Education. Available online at http://peopleforeducation.ca/mwm. Accessed on 9 February 2015.

Possin, K., 2013, February 21, 'A fatal flaw in the collegiate learning assessment test', *Assessment Update: Progress, Trends, and Practices in Higher Education*. Available online at http://www.assessmentupdate.com/sample-articles/a-fatal-flaw-in-the-collegiate-learning-assessment-test.aspx. Accessed on 12 January 2015.

Quality Assurance Agency, 2008, *The Framework for Higher Education Qualifications in England, Wales and Northern Ireland: August 2008*, Mansfield: Author.

Refling, E., and Borwein, S., 2014, *Bridging the Divide, Part II: What Canadian Job Ads Produced*, Toronto: Higher Education Quality Council of Ontario. Available online at http://www.heqco.ca/SiteCollectionDocuments/Skills%20Part%203.pdf. Accessed on 9 February 2015.

Tamburri, R., 2013, February 6, 'Trend to measure learning outcomes gains proponents' *University Affairs*. Available online at: http://www.universityaffairs.ca/trend-to-measure-learning-outcomes-gains-proponents.aspx. Accessed on 14 October 2014.

Tuning Russia, 2013, *Tuning Russia*. (http://tuningrussia.org/). Accessed on 30 May 2014.

Tuning Educational Structures USA, 2014, *Tuning USA*. (http://tuningusa.org/). Accessed on 1 August 2017).

Wabash National Study of Liberal Arts Education, 2009, *Wabash National Study 2006–2012: Overview*. (http://www.liberalarts.wabash.edu/study-overview)/. Accessed on 30 May 2014.

Weingarten, H., 2014, 'Managing for quality: classifying learning outcomes', In, *It's Not Academic: Thoughts, Ideas, Kudos & Brickbats from HEQCO*. (http://www.heqco.ca/en-CA/blog/default.aspx). Accessed on 5 May 2014.

What is Tuning Africa?, 2016, *Tuning Africa*. (http://tuningafrica.org/en/what-is-tuning-africa). Accessed on 8 July 2016.

Yopp, J. and Marshall, D., 2014, 'Tuning USA: meeting the challenges of US higher education' (Webinar), *Institute for Evidence-Based Change*. (http://www.iebcnow.org/News And Publications/Videos.aspx). Accessed on 30 May 2014.

Quality Issues in Kenya's Higher Education Institutions

Rosemary Kagondu* & Simmy M. Marwa**

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

---

*   Former Head of Quality Assurance – Dedan Kimathi University, Nyeri, Kenya. Email: kagondu@gmail.com
**   PhD, Director, Business Administration Programme, Dedan Kimathi University, Nyeri, Kenya. Email: mwitamarwa@yahoo.com

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.

Key words: Quality Assurance, Perception, Gaps, Kenya, Higher Education

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	Gouver-nance			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.

References

Anderson, G., 2015, (Dec 30) 'We must save the quality of our university education, and the time to do that is now'. Daily Nation newspaper. Retrieved from http://www.nation.co.ke/oped/Opinion/We-must-save-the-quality-of-our-university-education/-/440808/3014142/-/cvap8nz/-/index.html on July 15, 2016.

Bryman, Alan & Cramer, Duncan, 1995, *Quantatitive data analysis with SPSS for Windows. A guide for social scietists*. New York: Routledge.

Cameron, R., 2009, 'A sequential mixed model research design: design, analytical and display issues'. *International Journal of Multiple Research Approaches* Vol. 3 No. 2: 140–151.

Creswell, J. W. & Tashakkori, A., 2007, 'Editorial: Differing perspectives on mixed methods research'. *Journal of Mixed Method Research* Vol. No. 14: 303–308.

CUE, 2014, *The Universities Regulations 2014, Kenya Gazette Supplement* No. 86.

CUE, 2017, *Accreditated Universities in Kenya-March 2017,* Commission of University Education in Kenya: Nairobi.

Evans, J. R., 2005, *Total Quality Management, Organization, and Strategy*, (4th Edn.) South-Western: Thomson/South Western, Indiana University, pp. 22–26.

GoK, 2007, *Kenya Vision 2030, A Globally Competitive and Prosperous Kenya,* Government Printers, Nairobi.

GoK, 2012, *The Universities Act, No. 42,* Government Printers Limited: Nairobi.

Gudo, C.O., Olel, M. A. &, Oanda, I. O., 2011, 'University Expansion in Kenya and Issues of Quality Education: Challenges and Opportunities', *International Journal of Business and Social Science* Vol. 2 No. 20, pp. 1–12, Mallesham (2005).

Isaac, S. & Micheal, W.B., 1981, *Handbook in research and evaluation: A collection of principles, methods and strategies useful in planning, design.* San Diego: EdITS Publishers, 1981, pp. 234.

IUCEA & DAAD, 2010, *A Road Map to Quality. Handbook for Quality Assurance in Higher Education*, Vol 1. Guidelines for Self-Assessment at Programme Level, Retrieved from http://www.iucea.org/index on 11/6/2014.

Kigotho, W., 2008, '"Death of Research in Africa"'. *The Standard*, Wednesday 1st October 2008, Retrieved from http://www.estandard.net. on 24/10/2014.]

Kenya National Bureau Statistics, 2015, *Statistical Abstract 2015*, Kenya National Bureau of Statistics, Nairobi.

Kuria, M & Marwa, S.M., 2015, *Shaping Internal Quality Assurance at Daystar University,* Retrieved from http://www.daystar.ac.ke Retrieved on 27/9/2016.

Lewis,W.G., Punn, K.F., & Lalla, T.R.M. 2006, 'Exploring soft versus hard factors for TQM implementation in small and medium –sized enterprises'. *International Journal of Productivity and Perfomance Management,* Vol. 55 No. 7, pp. 539-554, https://doi.org/10.1108/17410400610702142.

Ludeman, R. B., Osfield, K. J., Hidalgo, E. I., Oste, D., & Wang, H.S., 2009, 'Preface'. *Students affairs and service in higher education: Global foundations, issues and best practices, (pp. ii–vi), Unesco and World Conference on Higher Education.*

Malechwanzi, J. M & and Mbeke, C., 2016, 'Policies of access and the quality of higher education in China and Kenya: A comparative study', *Cogent Education*, Vol. 3, No. 1, p. 1201990. doi: 10.1080/2331186x.2016.1201990.

Marwa, S.M., 2014, *Nurturing Corporate Excellence. Glimpses of Quality Challenges and Management in Contemporary Corporate Africa. A Managerial Imperative.* Published by Jomo Kenyatta Foundation, Kenya.

Mazzoleni, R., 2008, 'Catching up and academic institutions: A comparative study of past national experiences'. *Journal of Development Studies*, Vol. 44 No. 5, pp. 678–70.

Mbirithi D., 2013, 'Management Challenges Facing Kenya's Public Universities and Implications for the Quality of Education'. PhD thesis submitted at Kenyatta University.

Meek L., TeichlerU., & Kearney M.L., 2009, *Higher Education Research and Innovation,* Changing Dynamics, Kassel: International Centre for Higher Education Research Kassel (INCHER-Kassel), pp 56–59.

MOEST, 2007, Strategic Plan 2007–2012. 'Science, Technology and Innovation for National Prosperity and Global Competitiveness'. Retrieved from http://www. moest.gov.ke on 23/7/2016.

Mugenda, A. & and Mugenda, O., 2003, *Readings in research methods: quantitative and qualitative Approaches*. Nairobi: African Centre for Technology Studies.

Mutula S., 2002, 'University Education in Kenya. Current developments and future outlook'. *International Journal of Educational Management*, Vol. 16 No. 3, pp. 109–119.

Mwiria, K., Ng'ethe, N., Ngome, C., Ouma, O. D., Wawire, V. & and Wesonga, D., 2007, *Public & Private Universities in Kenya: New Challenges, Issues, and Achievements*. Oxford, UK: James Currey.

Ndirangu M. & and Udoto M., 2011, 'Quality of learning facilities and learning environment. Challenges for teaching and learning in Kenya's public universities'. *Quality Assurance in Education.* Vol. 19, No. 3, pp. 208–223.

Nganga, G., 2014, (May 9). 'Student numbers soar by 35%, university funding lags'. *University World News*, Issue No. 319.

Ngware, M. W. & and Ndirangu, M., 2005, *Quality Assurance in Education*, Vol. 13, No. 3, pp. 183–201.

Odhiambo, G. O., 2008, 'Elusive search for quality education: the case of quality assurance and teacher accountability'. *International Journal of Educational Management,* Vol. 22, No. 5, pp. 417–431.

Ogeto, A., 2015, (October 5), 'High student enrolment has led to shortage of facilities and services'. *Daily Nation*. Retrieved from Daily Nation Newspaper. Retrieved from http://www.nation.co.ke on 6/8/2016.

Okwakol, M. J. N., 2008, 'Challenges and prospects for quality assurance in science and technology education in African countries: the Uganda Higher Education Review', *Journal of the National Council for Higher Education*, Vol. 5, No. 2, pp 17–26.

Olayo, J.O., 2005, The Impact of Employee Empowerment on Work Performance: Case Study of Selected Universities in Kenya'. Unpublished MBA thesis, Kenyatta University.

Ondigi, S.R., 2012, 'Role of geography and pedagogical approaches used in the training of pre-service teachers in Kenyan universities: a case of Kenyatta University'. *International Journal of Academic Research in Progressive Education and Development*, Vol 1, No. 4, pp. 26-281.

Sahney, S., Banwet, D. K. & and Karunes, S., 2004, 'A SERVQUAL and QFD approach to total quality education: a student perspective', *International Journal of Productivity and Performance Management*, Vol. 53, No. 2, pp. 143-166.

Sifuna, D.N., 2010, 'Some reflections on the expansion and quality of higher education in public universities in Kenya', *Research in Post-Compulsory Education*, Vol. 15, No. 4, pp. 415–425.

Usher, A., & and Savino, M., 2007, 'A global survey of university ranking and league tables', *Higher Education in Europe*, Vol. 32, No. 1, pp. 5-15. Retrieved from http://www.informaworld.com/smpp/title~content.

Wangenge-Ouma, G., 2007, ' "Higher education marketization and its discontents: the case of quality in Kenya'", *Higher Education*, Vol. 56, pp. 457-71.

Wanzala, O., 2015, (Oct 1), 'World Bank warns unskilled graduates hurting Vision 2030', *Daily Nation*. Retrieved from http://www.nation.co.ke on July 18 2016.

Wanzala, W. 2013, 'Quest for quality and relevant higher education, training and learning in Kenya: an overview'. *Education Journal* 2013; Vol. 2 No. 2, pp. 36-49, pp. 36-49. Published online: http://www.sciencepublishinggroup.com/j/edu) doi: retrieved March 2, 2014.

University Students' Learning Experiences:
Nuanced Voices from Graduate Tracer Study

Omar Badiru Egesah* & Mary Nyawira Wahome**

Abstract

To strengthen teaching and learning for university students in the East African region, universities can employ various strategies many of which resonate best teaching and learning practices. Around East Africa, good teaching and learning practices are highly sought by higher education governing bodies such as the Inter-University Council for East Africa (IUCEA) and in-country bodies such as Ministries of Higher Education (MoHE) and Commissions for University Education (CUEs). Universities have a variety of approaches they apply to ensure quality assurance of services they provide to students, who are their key stakeholders. These include quality manuals and academic procedures, that if judiciously utilised can ensure effective teaching and learning. These quality instruments that are informed by the International Organization for Standardization (ISO), aspiring to quality in teaching and learning, but to date this pursuit is in its early stages their application. One recent and innovative way of ensuring quality learning at universities worldwide, is the utilisation of feedback from graduates for improvement of teaching and learning spaces, conditions, provisions and programmes. This feedback can be obtained and used from graduate tracer studies (GTS). Moi University researchers in Kenya developed and conducted a GTS, which yielded results indicating that there are challenges in the teaching and learning activities of the university. The GTS results further, reveal weaknesses in teaching and learning, that the university should address by aligning improvement plans to the lessons learnt to improve teaching and learning. The GTS was conducted between 2010 and 2013, using a survey tool that examined the following objectives: sociobiographic characteristics of respondents; study conditions, provisions and experiences; job search and transition to work; employment and work; work and competencies; study and work link. This paper reports how voices of graduates sought and

*   Department of Anthropology and Human Ecology, Moi University, Eldoret, Kenya.
     Email: omagesa@gmail.com
**   Department of Philosophy and Religious Studies, Moi University, Kenya.

reported through the GTS can be used to improve teaching and learning at Moi University by addressing study conditions, study provisions and study programmes. Results indicate how expansion into practical, field, outreach and skills and competencies-based teaching and learning is nuanced, clearly, the results are key to the university's future directions and efforts.

Keywords: graduate voices, graduate tracer studies, feedback, improvement, teaching and learning, Kenya

Résumé

Dans le but d'améliorer l'enseignement et l'apprentissage pour les étudiants des universités de la région de l'Afrique de l'Est, les universités peuvent employer diverses stratégies dont la plupart résonnent mieux avec les pratiques d'enseignement et d'apprentissage. Partout en Afrique de l'Est les bonnes pratiques d'enseignement et d'apprentissage sont hautement recommandées par les organes de gouvernance de l'enseignement supérieur tels que le Conseil interuniversitaire d'Afrique de l'Est (IUCEA) et les entités au niveau national telles que les Ministères de l'Enseignement Supérieur (MoHE) et les Commissions de l'enseignement universitaire (CUEs). Les universités ont, pour leur part, une variété d'approches qu'elles appliquent pour garantir l'assurance qualité des services qu'elles fournissent aux étudiants qui sont leurs intervenants clés. Celles-ci comprennent les manuels de qualité et les procédures académiques, qui si elles sont utilisées de façon judicieuse peuvent garantir un enseignement et un apprentissage de qualité dans les universités. Dans la région de l'Afrique de l'Est, ces instruments de qualité qui s'inspirent de l'Organisation internationale de normalisation (ISO), rehaussent la qualité de l'enseignement et l'apprentissage, mais leur réalisation ne fait que commencer. Une méthode récente et innovante pour garantir la qualité de l'apprentissage dans les universités au niveau mondial est l'utilisation du feedback reçu des diplômés pour améliorer les espaces de l'enseignement et de l'apprentissage, les conditions, les dispositifs et programmes. Ce feedback peut être obtenu et utilisé à partir des études de suivi périodique des diplômés (GTS). Les chercheurs de l'Université Moi ont développé et conduit une étude de suivi périodique des diplômés dont les résultats indiquent l'existence de défis dans les activités d'enseignement et d'apprentissage de l'université. Les résultats, révèlent par conséquent des points faibles au niveau de l'enseignement et de l'apprentissage, auxquels l'université devra remédier en élaborant des programmes d'amélioration des enseignements tirés des résultats de l'étude de suivi périodique des diplômés pour améliorer l'enseignement et de l'apprentissage à l'université. L'étude de suivi périodique des diplômés a été menée entre 2010 et 2013, au moyen d'un outil de sondage qui a examiné les objectifs suivants: les caractéristiques socio-biographiques des personnes interrogées, les conditions d'étude; les dispositions et les données d'expérience; la recherche d'emploi et la transition au travail; l'emploi et le travail; l'étude sur

le travail et les compétences ainsi que l'hyperlien d'emploi. Le présent article décrit comment les voix des diplômés dans cette GTS peuvent être utilisées pour améliorer l'enseignement et l'apprentissage à l'université Moi en s'attaquant aux conditions d'études, aux dispositifs et aux programmes d'études. Les résultats indiquent comment l'expansion dans l'enseignement et l'apprentissage pratique, fondés sur les compétences et les qualifications, le terrain, et les programmes externes de formation, est nuancée et proposent d'augmenter la voix monocorde des cours et de l'enseignement et l'apprentissage à partir de la bibliothèque à l'université. Les résultats des feedbacks directs de la part des diplômés ont été analysés et présentés de façon facile à utiliser par l'université.

Mots clés : voix des diplômés, étude de suivi périodique des diplômés, feedback, amélioration, enseignement et apprentissage, Kenya

Introduction

Globally, higher education institutions are becoming more interested in receiving systematic feedback from their graduates in order to see how their primary products, the graduates, perceive the usefulness of their study experiences and outcomes. In tandem, is increased internal and external pressure on universities for accountability in service provision and teaching and learning processes forcing universities to continuously improve the quality of services rendered. To produce quality graduates that can steer viable development in thought and practice, universities worldwide must instill and adhere to quality service provision. Institutions of higher learning are increasingly curious about how well study programmes deliveries contribute to learnings by their graduates. Two important questions are asked: How skilled and competent are the graduates on completion of their study programmes?; Are the programmes and the manner in which they are delivered adequate for learners to master skills and gain competencies to the level expected of them upon entry into the job market? One recent and innovative way of ensuring quality learning at universities worldwide, among several options, is utilisation of feedback from graduates for improvement of teaching and learning at universities, especially, to improve study conditions, provisions and programmes. This feedback is increasingly being obtained and used from graduate tracer studies (GTS). University GTS are emerging avenue through which higher education institutions can obtain vital feedback mainly for the improvement of their study programmes, specifically, for the revision of curricula; improvement of study facilities, libraries, and laboratories and enhancement of teacher–learner interactions for better learning outcomes. Our GTS questionnaire embraced a range of subjects and important results were obtained regarding study conditions, study provisions and study programmes. Notwithstanding, universities in the

region are privy to a plethora of other generic and innovative ways to improve teaching and learning, including but not restricted to, cyclic curriculum reviews, evaluations of programmes and instructors, labour market surveys, employer surveys, graduate destination surveys and even in-session students surveys. This article is confined to learning experiences of immediate users of university programmes and how their perspectives obtained through a GTS, can be used to improve study programmes and enhance learning environments.

Literature Review

Towards the end of the twentieth century, European universities embraced the use of GTS for a variety of reasons, especially for accreditation, to explain the link between study programmes and the job market, to show uniqueness and positioning of individual universities and also to enable universities and institutions managing higher education in their respective countries make informed and evidence-based decisions about improvements and quality education and services in higher education (Schomburg and Teichler 2011). Institutions of higher learning can make informed and evidence based decisions about improvement of education and services through evidence gleaned from GTS (Schomburg 2007). To strengthen teaching and learning for university students in the East African region, universities employ various strategies, impacting best teaching and learning practices prescribed by higher education governing bodies such as the Inter-University Council of East Africa (IUCEA) and in country bodies such as Ministries of Higher Education (MoHE) and Commissions for University Education (CUEs). The importance of GTS feedback for quality assurance has been emphasised elsewhere, for instance by Wahome, Egesah and Wanyama (2015) in their paper entitled '*Entrenching Quality Assurance Culture through GTS in East Africa: Lessons learnt, challenges and prospects from MUTRACE*'. This paper argues the importance of feedback through nuanced voices of graduates obtained by GTS, postulating that such feedback carries important experiences and lessons that universities can use to improve learning programmes. The United Nations Educational, Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-operation and Development (OECD) and other key players in higher education have emphasised the importance of feedback in improvement of the learning process and outcomes (OECD 1999).

Besides embracing GTS, Moi University is pursuing other avenues to improve learning at the university. The university, together with four other African universities, aims at improving the learning experiences in African universities and embracing academic mobility under the EU-AAU initiative; the Intra-Africa Academic Mobility Scheme, to set the stage for effective

knowledge exchange between the five universities in four distinct regions of the African continent. The Academic mobility functions in the five partner universities (i.e., Moi University [Kenya]; Université Mohammed V de Rabat, [Morocco]; Addis Ababa University [Ethiopia]; Université d'Abomey-Calavi, [Benin]; and Universidade Eduardo Mondlane [Mozambique]. Students are able to learn across partner universities to experience newer education contexts and environments. Today, many education researchers are arguing for concerted efforts towards the improvement of teaching and learning in institutions of higher education (Jørgensen, Haland and Kofoed 2008; Nielsen, BoerandGertsen 2008). In addition, Douglass, Thomson and Zhao (2012), argue in favour of the value of self-evaluations for use of results in the improvement of learning outcomes: '*Without excluding other forms of gauging learning outcomes, we conclude that, designed properly, student surveys offer a valuable and more nuanced alternative in understanding and identifying learning outcomes in the broad tapestry of higher education institutions*' (Ibid).

According to Teichler (2011), Schomburg and Teichler (2011) and Herrmann, Digger and Junghanns (2010), the benefits of GTS results are immense. We also argue that the benefits are dynamic and cyclical, since graduates out in the field provide essential feedback information to improve learning at their former institutions and the beneficiary is the next student at the institution. The university is also a beneficiary since this effort improves learning environments and outcomes. A further beneficiary of GTS is the employer in the job market, since an improved learning environment means the harnessing of critical skills and competencies that relevantly link and match the training and the job. Egesah, Wahome, Langat and Wishitemi (2014), and Egesah and Wahome (2015). Further, studies by Schomburg (2003, 2007), Ramos (2006), Herrmann, Digger and Junghanns (2010), Teichler *et al.* (2011) and Schomburg and Teichler (2011) all converge and further this argument.

Globally, quality higher education translates into employment, efficiency and productivity; all elements that drive sustainable economies and desirable social transformations. To contribute on this pathway, to this course there are GTS outcomes and benefits are gradually gaining ground on the East African Higher Education platform. In Europe and America, GTS have in the recent past been part and parcel of the tools in use to measure and evaluate quality and benefits of university education. In Germany for example, under the graduate survey cooperation project (KOAB) initiative, German universities conduct joint GTS amd utilize the results to improve institutions of higher learning. In East Africa, GTS are shifting from anecdotal, disjointed episodes often isolated in a few universities, to a much more unified and systematised approach inspired by the German school of GTS.

Cui bono –who is the beneficiary of GTS outcomes in the East African region? GTS results consistently reveal from the 'cui bono' (the immediate users) of undergraduate study programmes, the strengths and weaknesses of study programmes, provisions and facilities. These evaluative results generated from immediate former graduates do not benefit the research subject; the graduate, but can be used by universities to improve teaching and learning programmes immensely, thus creating suitable learning environments to produce graduates with knowledge, skills, and competencies required to drive socioeconomic change in sustainable ways.

Method

Researchers at Moi University developed and conducted a GTS whose results are being utilised to improve teaching and learning of students at the university. The tracer study was conducted between 2010 and 2013 with the graduate cohort from 2009, using a survey tool that examined experiences of graduates who were on the job market one year after completing their university Bachelor Degree in Arts, Law, Information Sciences, Engineering, Medicine, Nursing, and Environmental Health. The study questionnaire was employed to retrieve from the graduates, actionable information that underpins their experiences in the following areas: sociobiographic characteristics; study conditions, provisions and experiences; job search and transition to work; employment and work; and work and competencies – study and work link. A consideration of the methodological processes culminating in the GTS at Moi University and the challenges faced in conducting a pioneering GTS in a new field are previously presents (Egesah *et al.,* 2014). Unique to GTS are exigent but arduous and systematic methodological processes that range from development of accurate data banks, design of fitting target samples and data collection methods and analyses of tailor-made results to suit each identified stakeholder, including students, graduates, university management organs, faculties, academic and service departments.

Prior to the GTS survey at Moi University, the researchers were trained and grounded in the theory and methodology of GTS from INCHER-Kassel University in Germany, and they adopted a standard approach to the survey preparation and utilisation of results, based on the German school of thought in GTS. This was followed by centring on preparation of the GTS survey, its design and the development of the questionnaire to address both ubiquitous universal and standard core themes as well as Moi University specific and individualized questions. The latter yielded domesticated results that demonstrate the relevance of students' learning experiences. These are intrinsic Moi University results which university academic organs

and quality assurance enthusiasts can reflect on to improve the quality of students' learning.

In preparation, researchers sensitised and obtained support from the university to embrace GTS. The Vice Chancellor was approached for support of inaugural GTS at Moi University, and given that the university supported the training of the two researchers (authors) in this field, university support and goodwill was assured and granted. The researchers sensitised relevant organs of the university about the processes and benefits of GTS through strategic discussion meetings prior to the execution of the survey. This step was important in contributing to the academic units of the university, the alumni office and other key departments accepting and aiding to facilitate the survey. This field of GTS is new in the East African higher education environment and perhaps Moi University and the East African Quality Assurance Network (EAQAN) are early adopters of the initiative. As a consequence, it was prudent to plan the survey with this in mind, in order to mitigate any impediment to its successful implementation. A comprehensive graduates' address data bank was developed from seven faculties for the graduate cohort of 2009. A sampling procedure was not necessary since a census was intended to reach all the graduates from the seven faculties. Of course, embedded in there is the fact that we attempted to deliberately, and purposively reach this multi-disciplinary undergraduate cohort. From a target population of 873 graduates, 722 had profiled their contact addresses and 470 had reachable contacts: hence, they were contacted to participate in the GTS. The survey used telephone and email contacts to reach and obtain responses, ultimately contacting 191 graduates, reflecting a response rate of 41 per cent, utilising three iterative standard telephone reminders. The survey took three months and delivered cardinal results that provide feedback that, if used well, can improve students' learning experiences at Moi University and in similar universities in the East African region.

Indeed, the scope and conduct of systematic and meaningful graduate tracer surveys is increasing in Africa and East Africa, despite the fact that several universities have kept conducting their own GTS here and there. The Inter-University Council of East Africa and the Commission for University Education, Kenya, are on record for initiating and conducting GTS taking dimensions of surveying graduates from single programmes and even emphasising the employers' perspectives on the relevance of university graduates to the job market.

In the East African region, the authors of this paper in partnership with collaborators from the Universities of Kassel, Duisburg-Essen and Koln are presently training a cohort of twenty-two quality assurance officers from

East African Universities on the project known as 'UNTRACE 2.0', 2015–2016. The UNITRACE 2.0 project aims at scaling up GTS and revamping its application and benefits in East Africa and beyond. The twenty-two trainees on the project, through a series of four training workshops and two online mentorship forums, graduated at the end of 2016 after successfully conducting a pilot GTS at their universities. Hence, applications and the benefits of tracer studies are being experientially revealed through capacity building and applied through uptake and utilization by stakeholders of the results for the pilot studies conducted under the tutelage of the partners. The partner universities UNITRACE 2.0 are: [Kenya]: Moi University, Technical University of Kenya, Laikipia University, Catholic University of Eastern Africa, Tangaza University College and Dedan Kimathi University; [Uganda]: Islamic University in Uganda, Uganda Christian University; [Tanzania]: University of Dar es Salaam, The Aga Khan University and State University of Zanzibar.

Notwithstanding, the UNITRACE 2.0 initiative demonstrates that plans are underway to use GTS in supporting teaching and learning quality in various universities around the region. These pilot study results will be combined with results from subsequent surveys by future trainees and trainer will, assess teaching and learning library facilities and also assess learning conditions including space, capacities, facilitation, amenities and environments, with a purview to improvement and enhancement.

Findings

In Kenya, generally speaking, there is a slightly higher number of males (over 55 %) that attend education institutions than females, and this was reflected in our survey cohort. Most graduates (67%) were aged between m 25-27 years by the time the study was conducted (median, 26 years), which was a few years after they graduated. This paper reports how voices of graduates, who participated in this GTS can be used intrinsically, to improve teaching and learning at Moi University by addressing study conditions, study provisions, and study programmes.

Learning and Curriculum Delivery

The library and information communication and technology (ICT) learning resources were rated with an average rating of three on an ordinal scale of five items. Other facilities, including recreational and accommodation facilities were also rated as average, offering a lesson that the university should work towards improving important facilities such as the library

learning resources. Lectures (78 %) and field courses/attachment (62 %) are learning modes most popularly used in curriculum delivery at Moi University. Emphasis is also highly laid on students' participation in research (53 %), internship (57 %), practical exercise, field courses and practicum (62 %), discussions (59 %). Rating for conducting research, dissertation and research paper work were also well placed (33 %). However, field courses were used to a lesser extent in curriculum delivery, which deprives the learner of an additional opportunity for open-ended learning from outside the lecture room. Fieldwork was rated as averagely used (median and mode 3). However, 30 per cent of the respondents indicated that demonstrations were not emphasised for use at Moi University. Equally, community services and outreach-oriented learning were rated lower and poorly utilised. Moi University graduates complete studies on time, as reported by 92 per cent of the respondents. Timely completion of studies is most desired by students, teaching departments and parents of students under any given circumstances, and it hints to uninterrupted learning. In Kenya, university students may fail to complete their degree studies in time as a result of various factors including repeating academic years due to poor performance and failure to raise fees. This high timely completion rate is a favourable result for the university, given that students and parents face factors for enrolment.

Job Preparedness, Skills and Competencies

Graduates undertook additional skills training during and soon after their degree study, including courses in ICT, project management, environmental impact assessment, certified public accounts (CPA), certified public secretary (CPS), geographical information systems (GIS), human resource management (HRM), entrepreneurship, disaster management, languages and leadership. Graduates took these courses to augment knowledge acquired from degree courses, as skills-oriented courses that give them an upper edge to compete for jobs and to perform better at work. This supplementary coursework implied that the university was not offering programmes that were advantageously strategic and holistic in preparing the graduate for the job market, which is an important lesson to base improvement on, as shown on Table 1 below. Graduates consider mostly salary in selecting their first job offer (42 %). They also consider how challenging a job is, and 22 per cent indicated preference for challenging jobs. In selection of jobs, they were least likely to consider benefits like housing, transportation, overtime pay and proximity to house. Other considerations mentioned included type of profession, career development, exposure to practical experience, passion for the job, internship, direct posting

by ministry, experience in a busy job, relevance to their study programme, favourable location of the job, among other factors. However, the graduates do not consider career and professional growth as important factors in choosing their first job.

The relationship between the field of study for graduates and the area of work was rated by graduates as very high (70 %). Nearly three-quarters of the graduates reported that they gained required competencies for their jobs from the programmes offered at the university and, in fact, 64 per cent indicated that the university directly contributed to the acquisition of the skills and competencies. These results indicate that Moi University study programmes are relevant to the job market and graduates acquire competencies from the courses they take at the university, that enable them to fit into their jobs after graduation. Around East Africa, universities are challenged to train and produce graduates that are competent to perform relevantly on the job market, to steer the much desired socioeconomic development and to facilitate social and health wellbeing. Therefore, the findings of this study is a reassuring result to most universities in the East African region, and the result corresponds with the findings by the Inter-University Council of East Africa which showed 78 per cent rating by universities indicating relevance of their graduates to the job markets, their graduates. In the same study, the council indicates that 49 per cent of employers rated, university graduates as relevant to the job market (Nkunya 2014). Table 1 next below summarizes results that speak to the improvement of teaching and learning services.

Table 1: Selected Results for Improvement of Teaching and Learning

Result	Improvement action for quality education & services	Progress indicator
Library, ICT and resource facilities were rated average (3 on scale of 5)	Update library with relevant & hard & e-resources for teaching &learning	e-resources at libraries and search engines
Infrastructural facilities – teaching & learning, medical, recreational & accommodation, were rated average (3 on scale of 5)	Build and equip infrastructural facilities to set conducive teaching & learning environments	Wide range of extra curricula, sports & service activities
Graduates undertook additional skills training during and soon after their degree study (e.g., CPA, CPS, GIS, HRM)	Embrace skills, professional & competencies training for life skills, for competition for jobs & for application at work	Skills training in computer, GIS, accounts, etc., on offer

Lectures (78%) and field courses/ attachment (62%) are learning modes most emphasised, but not, outreach & community-service oriented modes of teaching &learning	Strengthen outreach, community service learning programmes & structures	Students of law, medicine, hospitality, engineering learn as they offer services
92% graduates complete studies in time	This is commendable, but why not 100%?	Drive to perfection
Graduates consider most; salary in selecting their first job offer (42%) but not career & profession	Strengthen career interests and professionalism in training	Career interest
Link between the field of study & area of work rated as very high (70%)	Commendable with room for improvement	All medicine and engineering graduates were absorbed into the job market soon after graduation
75% gained required competence for job & 64% indicated that the university contributed to this	Focus on market-oriented training	Job relevance of programmes for example, tourism & aerospace engineering

These results message the point to expand learning and teaching activities into practical, field, outreach, and skills and competencies based-learning to augment the traditional lecture and library teaching and learning at the university. Results were analysed and disseminated to various organs responsible for the improvement of teaching, learning and services that aid quality learning at the university. The academic division at the university is using these results for improvement in many ways. For example, the strengthening of field courses in curriculum delivery, tapping on initiatives such as community-based education and services, practicum and attachment may lead to future improvements. As academic departments of Moi University revise their curricula, they are considering skills and competencies courses taken by students as elective courses to complement the core fields of study.

Discussion

Higher institutions of learning in the East African region are seeking methods to improve their learning and teaching programmes to benefit students who are pursuing graduate degree programmes. One of the most recent ways

by which institutions of higher learning are generating empirical evidence to inform improvement of their study programmes and environments is by GTS. The importance of improving teaching and learning at higher institutional level through feedback cannot be over emphasised. According to the University of Reading, 'Feedback is an essential part of effective learning. It helps students understand the subject being studied and gives them clear guidance on how to improve their learning' (www.reading.ac.uk/internal/engageinfeedback, accessed 13 October 2015).

Researchers at Moi University conducted a GTS and are reporting the importance of feedback results in pointing out weaknesses in the learning by graduates. The university is already using lessons learnt from the experiences and perspectives of recent graduates to revise and improve curricula, to explore complementary modes to deliver the curricula, besides reliance on the lecture mode. In addition, the university is strengthening and enhancing reported best practices in the training of graduates, including timely completion of degree studies, and also including tailoring degree courses to desirable development initiatives lined up on the job market. This resonates well with the public challenge for East African universities, to train and churn out graduates who are skilled and competent, and who apply lecture room knowledge and theory to solve human problems and initiate socioeconomic development for human wellbeing. Notwithstanding, feedback distilled from recent users of teaching and learning programmes can be most useful. By this means, universities can utilise feedback by form of 'self-agency' to directly apply comments and opinions made by immediate users of programmes to improve teaching and learning. Bellon *et al.* (1991) and Race (2001) both independently argue that academic feedback is more strongly and consistently related to achievement than any other teaching behaviour or learning process. Bellon *et al.* particularly buttress improved teaching and learning from feedback derived from a research knowledge base, such as GTS, in this case. Analyses and interpretations that derive from GTS can, therefore, be applied to review teaching curricula. As indicated in the results section, such results can be used to indicate newer and more market-oriented programmes and even to show where weaknesses are, in the training and learning process. If traditional lectures are rated as average in curriculum delivery, focus should then shift to more interactive and practice-oriented modes of teaching and learning. Contemporarily, global education bodies led by UNESCO are indeed advocating for interactive and perhaps not just pedagogical and didactic teaching and learning approaches. The vast majority of bachelor degree graduates of Moi University remarkably complete their degree programmes in time. In a study by Yorke (2002),

great importance is placed on timely completion of higher education studies by students, and in the work, it is argued about the detriment of failure and of non-completion and in time, of university programmes. In this study, competencies gained by graduates are relevant to the job market as ascribed to by Moi University results and as desired by the Commission for University Education in Kenya (CUE), the Inter-University Council of East Africa (IUCEA) and stakeholders including the Ministries of Higher Education, potential employers, parents, students and the public. This phenomenon has been revealed through GTS worldwide (Schomburg and Teichler 2011).

Conclusion

This article, strongly recommends utilisation of GTS results to generate university specific feedback that should be used to improve graduates' teaching and learning experiences. We conclude that improved learning environments obtained from feedback by graduates can facilitate the link and match of graduates' competencies gained from university programmes with the job market which is an imperative in East Africa and, indeed, globally.

References

Bellon, J. J., Bellon, E. C., and Black, M.A., 1991, *Teaching from a research knowledge base: a development and renewal process*, facsimile edition, New Jersey: Prentice Hall.

Douglass, J. A., Thomson, G., and Zhao, C., 2012, 'The learning outcomes race: the value of self-reported gains in large research universities'. (http://link.springer.com/article/10.1007/s10734-011-9496-x). Accessed 15 October 2016.

Egesah, O. B., Wahome, M., Langat, E.K., and Wishitemi, B.E.L., 2014, 'University graduate tracer studies (UNITRACE): methodological lessons and utilization of selected results in Kenya', *Journal of International Academic Research for Multidisciplinary*, Vol. 2, No. 8, pp. 305–325.

Herrmann, D., Digger, B., and Junghanns, M., 2010, *Specialized Questionnaires in Graduate Tracer Studies; Demand, Development and Back Channeling Results*, Koln: University of Cologne.

Jorgensen, F., Hayland, P., and Kofoed, L.B., 2008, 'Examining the role of human resource management in continuous improvement'. *International Journal of Technology Management*, Vol. 42 No. 1-2, pp. 127-142. (http://www.inderscienceonline.com/doi/abs/10.1504/IJTM.2008.018064). Accessed 15 October 2016.

Nielsen, J.S., Boer, H., and Gertsen F., 2008, 'The influence of learning in collaborative improvement'. International Journal of Technology Management, Vol. 42, Nos. 1/2, pp.107–126. (http://www.inderscienceonline.com/doi/abs/10.1504/IJTM. 2008. 01 8064). Accessed on 15 October 2016.

Nkunya, M., 2014, IUCEA Study preliminary findings. Paper presented at the East African Quality Assurance Network Conference. EAQAN Forum Keynote, Arusha May 2014.

OECD (Organization for Economic Co-operation and Development), 1999, 'Preparing Youth for the 21st century: Transition from education to the Labour market', Proceedings of the Washington DC Conference, February 1999: Washington DC.

Race, P., 2001. *Using Feedback to Help Students Learn*, New York: The Higher Education Academy.

Ramos, T., 2006, *Graduate Follow-up Instruments and Recommendations Manual*, Mexico: Instituto Technologico de Estudios Superiores de Monterrey.

Schomburg, H., 2003, *Handbook for Graduate Tracer Studies. Centre for Research on Higher Education and Work*, Kassel: University of Kassel, Germany.

Schomburg, H., 2007, 'The professional success of higher education graduates', *European Journal of Education*, Vol. 42, No.1, pp. 35-57.

Schomburg, H., and Teichler, U., 2011, *Employability and Mobility of Bachelor Graduates in Europe: Key Results of the Bologna Process*, Netherlands: Sense Publishers.

Teichler, U., 2011, *Lessons to be Learned from Graduates: Interpretation of the Results of Graduate Surveys*, Kassel: INCHER-Kassel.

Wahome, M., Egesah, O., and Wanyama, M., 2015, 'Entrenching quality assurance culture through graduate tracer studies in East Africa: lessons learnt, challenges and prospects from MUTRACE', *International Journal of Education Learning and Development*, Vol. 3, No. 2, pp. 15–24. *www.reading.ac.uk/internal/engageinfeedback*, accessed 13/10/2015.

Yorke, M., 2002, 'Academic failure: a retrospective view from non-completing students', in, *Failing Students in Higher Education*, M. Peelo, and T. M Wareham, eds, Maindenhead: SRHE and Open University Press.

Institutional Constraints Affecting Quality Assurance Processes in Tanzania's Private Universities

Samson John Mgaiwa* & Johnson Muchunguzi Ishengoma**

Abstract

The purpose of this study is to identify the institutional constraints of quality assurance processes in Tanzania's private universities and colleges. The descriptive survey design combines qualitative and quantitative research approaches. Purposive, stratified, and random sampling procedures are used to select a sample of 486 participants in the study who comprised 191 academic staff, 291 students, and 4 quality assurance officials from four private universities. Questionnaires and interviews are used for data collection. The findings indicate that inadequate financing, lack of capacity in terms of adequate, qualified and experienced human resources to undertake quality assurance functions, lack of clear and viable quality assurance policies, lack of awareness on quality assurance issues, and lack of academic leadership were the identified major institutional constraints to quality assurance processes in Tanzania's private universities. The theoretical and policy implications of these findings are also discussed.

Keywords: quality assurance, constraints, private universities

Résumé

La présente étude a pour but d'identifier les contraintes institutionnelles des processus l'assurance qualité dans les universités et collèges privées en Tanzanie. Le plan de sondage descriptif combine les approches de recherche qualitative et quantitative. Des procédures d'échantillonnage intentionnel, stratifié et aléatoire ont été utilisées pour sélectionner un échantillon de 486 participants

*   Faculty of Education, Mkwawa University College of Education, University of Dar es Salaam. Email: mgaiwas@yahoo.com

**   School of Education, University of Dar es Salaam. Email: ishe2004@yahoo.com

dans l'étude qui sont composés de 191 personnels académiques, 291 étudiants et 4 officiels de l'assurance qualité issus de quatre universités privées. Les questionnaires et les entretiens ont été utilisés pour la collecte de données. Les résultats indiquent que les principales contraintes institutionnelles aux processus de l'assurance qualité au niveau des universités privées tanzaniennes sont l'insuffisance du financement, le manque de capacité en termes de ressources humaines qualifiées et expérimentées adéquates pour entreprendre les fonctions d'assurance qualité, le manque de politiques d'assurance qualité claire et viable, le manque de sensibilisation sur les questions d'assurance qualité, et l'absence de leadership académique. Les implications théoriques et politiques de ces ont été abordées.

Mots clés : assurance qualité, contraintes, universités privées

Introduction and Background

Until 1995, the Government of Tanzania (GOT) was the sole provider of university education, through the University of Dar es Salaam and Sokoine University of Agriculture. Both institutions, however, grew slowly in terms of student enrolments while Tanzania lagged behind other sub-Saharan African countries in terms of participation rates in higher education, number of universities and higher education outcomes (Ishengoma 2007). The increasing social demand for higher education, along with the demand for different types of university education, led to the initiation of policy measures to stimulate private sector involvement in university education in Tanzania. The GOT provided an enabling environment through legislation for the private providers of higher education to work effectively, which saw the repeal of the Education Act No. 25 of 1978, and the passage of the Education Act No. 10 of 1995 (United Republic of Tanzania (URT) 1999), marking the emergence of private universities in Tanzania. Since the repeal, the liberalisation of higher education has significantly increased the number of private universities (PRUs) in the country to include ten PRUs with full registration, and eleven university colleges with both full and provisional institutional registration (Tanzanian Commission of Universities (TCU) 2012a). However, student enrolment remained low for the following two decades. In 2011/2012, 46,995 students were enrolled in private institutions, accounted for 29.7 per cent of the total 157,812 Tanzanian university students (URT 2011).

The quality of education offered in PRUs was questioned among higher education stakeholders with respect to lower qualifications of academic members of staff; often staffing with primarily assistant lecturers, few doctoral prepared faculty professors and retired academic staff from public universities (Ishengoma 2007; Sabaya 2006; Simon 2010; TCU 2015). In 1995, the GOT established the

Higher Education Accreditation Council (HEAC) in order to register and accredit public and private universities. In 2005, the TCU replaced the HEAC (TCU 2012b) as the statutory body charged with the responsibility of overseeing and controlling the quality of post-secondary education. Within this mandate is the responsibility of controlling and ensuring adherence to the pre-determined standards approved by TCU in order to enforce regulations to guide the conduct and quality of universities and university colleges. The TCU is further charged with overseeing and monitoring the quality of infrastructure, criteria for recruiting academic and research staff, academic programmes, admission criteria, assessment of students, grading, classification, and recognition of awards (The Universities Act No. 7 of 2005).

The establishment of a higher education quality assurance structure has not translated directly to the ability of the commission to enforce that universities achieve acceptable quality standards. Quality assurance systems in private universities and university colleges remain weak and ineffective (Ishengoma 2007; Materu 2007). The purpose of this study is to identify the institutional constraints in conducting quality assurance and control processes in PRUs in Tanzania.

Study Method

This study uses a descriptive survey design. The design permits the researchers to summarise the characteristics of different groups and measure the attitudes and opinions toward the constraints and strategies of institutional quality assurance and control processes. The design also allows collection of qualitative and quantitative data using various methods from a wide population in a short period of time.

Setting and Sample

The study was conducted in four universities and university colleges in Tanzania. These universities and university colleges included: Ruaha University, Muslim University of Morogoro, St. John's University of Tanzania and St. Augustine University of Tanzania. These universities were randomly selected to represent the major zones in the country.

To obtain an acceptable and representative sample size for this study, researchers adopted a formula from Yamane (1967 cited in Israel 1992), to calculate proportionate sample size for survey studies of a given population. For the formula, researchers chose a 95 per cent confidence level and .05 precision level. Yamane's formula for calculating survey sample size in proportions is:

$$n = \frac{N}{1 + N(e)^2}$$

Where n is a sample size, N is total target population and e is level of precision. With the total target population of 21,126 academic staff and students from sampled PRUs, the proportionate sample size of each category of respondents totaled 191 academic staff, 291 students, and 4 quality assurance personnel, yielding a total sample of 486 respondents from the named institutions.

Data Collection and Analysis

Questionnaires were administered to 191 academic staff and 291students from four private universities and university colleges in Tanzania. The questionnaires solicited information on the constraints affecting quality assurance processes in Tanzania private universities. Qualitative data were collected through face-to-face unstructured interviews with four quality assurance officials. The interviews revealed the day-to-day constraints in the implementation of quality assurance processes in PRUs in Tanzania and the strategies implemented to address the challenges.

Collected data were sorted and placed in respective categories as per study objectives. Resurrectionists quantitative data obtained through questionnaires through SPSS© v.20 to calculate frequencies and percentages of the collected data. Qualitative data were coupled with the quantitative data to support the findings. On the other hand, data collected through interviews and documentary reviews were subjected to thematic analysis. Thematic analysis allowed for the analysis of qualitative data on the basis of relevant themes. In this study, thematic analysis involved six major stages: familiarisation with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing the report (Greener 2011; Yin 2011). Thematic analysis for qualitative data simplified interpretations of the data presented largely in narrative and descriptive form.

Findings and Discussion

Key Findings

The study objective is to identify the institutional constraints to quality assurance and control processes in PRUs in Tanzania. Study findings revealed four primary institutional constraints: 1) inadequate funding of quality assurance processes by the institutions; 2) lack of institutional capacity in terms of trained human resources in quality assurance in higher education; 3) lack of viable institutional quality assurance frameworks and policies; and 4) poor or lack of academic leadership and lack of awareness among academic staff about quality assurance issues.

Table 1: Institutional Constraints of QA and Control Processes in Private Universities (N=482)

Institutional Constraints to QA Processes	Academic Staff /Student Responses			
	Academic Staff Frequency	Students Frequency	Total	Relative Frequency
Inadequate funding of QA processes by the Institution	142	188	330	.247
Lack of human resource capacity in QA issues	133	196	329	.246
Lack of institutional framework/policy	128	150	278	.208
Lack of academic leadership	80	153	233	.174
Lack of awareness	42	124	166	.125
	525	811	1336	1.00

Approximately two-thirds of all survey respondents reported inadequate funding of quality assurance processes by institutions and lack of institutional capacity in terms of human resources as the major constraints to quality assurance and control processes at the institutional level, Other constraints reflected concerns with the lack of viable institutional frameworks/policies on quality assurance (58 %); lack or poor academic leadership to enforce quality assurance procedures (48 %); and lack of awareness of the importance of quality assurance processes (34 %).

Interview findings mirrored the survey findings in terms of challenges of inadequate funding, lack of awareness about quality assurance processes among students and academic staff and poor support from university administration. In addition, the interviews revealed issues in terms of lack of qualified academic staff, low academic qualifications among academic staff, as well as resistance to enforce quality assurance and control procedures among academic staff. Inadequate funding and lack of awareness were pointed in each of the surveyed PRUs, while lack of awareness and poor support from university management were reported in three out of four surveyed PRUs.

Inadequate Funding and Costs of Quality Assurance at Institutional Level

Quality assurance directors and coordinators in all private universities surveyed expressed concerns regarding the acute shortage in the budget for conducting institutional quality assurance and control processes. Respondents revealed that institutions do not budget for the high costs of quality assurance implementation processes, or the budgeted funds are not disbursed. As a

result, quality assurance processes in PRUs were not effectively conducted due to limitations in financial support. For instance, a quality assurance coordinator reported that:

> …, all of these processes are costly, just imagine you take a foreign external examiner, it is obvious you need to pay for his/her air ticket, hotel and honoraria. This costs the institution a lot of US dollars and particularly when you have many courses and degree programmes to be examined or reviewed. We would like to have even peer reviewers from classical universities like Harvard or Cambridge but the institution does not have that financial capacity to cover the costs… some times even to run the QA directorate the cost are also unbearable. Last year my assistant coordinator resigned because of acute shortage of funds to run the directorate. (QA Director PRUY 14/5/2013)

The finding implies that many quality assurance and control processes are not effectively conducted because of high implementation costs. In order to conduct quality assurance processes effectively, seminars and workshops, which are also costly, are paramount in order to ensure PRU administrators appreciate the importance and imperative of quality assurance. This finding is similar to Materu's (2007) argument that without adequate funding, institutional quality assurance processes, credibility, and integrity of their outcomes are threatened. Therefore, the cost of conducting quality assurance in private universities constrained PRUs from conducting quality assurance processes given the meagre financial resources available for that purpose.

Lack of Human Resource Capacity

Both the shortage of qualified staff and a disproportionate number of lower academic ranked staff were seen as contributing to a lack of human resource capacity in the implementation of quality assurance processes in the surveyed PRUs. Table 2 presents representation and qualification of academic staff in surveyed PRUs.

Table 2: Academic staff qualifications at participating private universities

Academic Qualification	Surveyed Private Universities			
	W	X	Y	Z
Professor	0	0	9	1
Associate Professor	1	0	7	2
Senior Lecturer	3	0	9	0
Lecturer	2	0	31	2
Assistant Lecturer	70	21	181	31
Tutorial Assistant	24	36	34	7
Total	**100**	**57**	**271**	**43**

Source: TCU, 2015

Academic staff with lower ranks do not have sufficient capacity to handle serious quality assurance processes such as institutional self-assessment, quality audit and external examination, and to conduct tracer studies. In their observation, Badiru and Wahome(2016) argue that for credible and trustworthy outcomes of tracer studies, there is a need that they are conducted by academics of senior rank. A similar observation was noted in one interview as noted below:

> …however, a big challenge we have now is inadequate number of lecturers and their low qualifications. Most of our lecturers hold masters [sic] degrees and bachelor's degrees, therefore to a large extent we are compelled to use part time lecturers from the University of Dar es Salaam and University of Dodoma. Therefore when we want to conduct comprehensive quality assurance activities such asself-assessment and internal audits we completely fail. (QA Coordinator PRU X 30/4/2013)

At another university, when probed about constraints of quality assurance processes at an institutional level, the respondent stated:

> For our case, actually we have inadequate number of academic staff in some departments especially natural sciences but the other thing is their ability and experience to QA issues as you know the idea of QA is new and we as institution are not familiar yet with the concept of QA as, so when it comes to conducting QA processes in our institution, we find ourselves in most cases at the crossroad. (QA Director PRU Z 8/5/2013)

According to TCU, the minimum education qualification for academic staff in universities is a doctorate degree (TCU 2014).Therefore, the use of underqualified academic staff, such as tutorial assistants and assistant lecturers, in universities suggests that quality assurance and control processes might be negatively affected. Success of institutional self-assessment, internal audits, external examination and academic reviews depends on adequate and qualified human resources since effectiveness of QA processes is highly dependent on the quality, dedication and integrity of those implementing and conducting the processes (Materu 2007; Matimbo 2002). Hayward (2006) suggests that senior academic staff need to conduct institutional self-assessments, peer reviews, and quality audits if the processes are to be effective and credible. Quality university performance is a direct function of the quality and number of human resources available in order to perform its duties with minimum constraints. Woodward (2003) suggests that unequal and limited human resources have curtailed many private institutions' ability to respond to the policy demands with regard to quality assurance.

Lack of Institutional Framework/Policy

A majority of academic staff and student respondents indicated a lack of institutional quality assurance policy despite evidence of such policies obtained through document reviews and interviews with quality assurance directors and coordinators. During the course of the study, all surveyed PRUs provided institutional quality assurance policy documents.

These contradicting findings suggest these policies are not public or widely disseminated to stakeholders, including academic staff, management and students. The consequences of this knowledge gap of the policy presence include a division of power between those who know and do not know, resistance to implementation and a lack of engagement in the implementation of the policies. The ultimate outcome is the risk of negatively impacting on the quality of education provided. There is a need for institutions to ensure the compliance of TCU guidelines, and create an environment where faculty and administration alike are guided by coherent internal quality assurance policies that can be easily interpreted by stakeholders for implementation purposes, and subjected to regular external stakeholder reviews.

Lack of Academic Leadership

Academic leadership provides direction to the vision/mission, leadership and administration, and requires senior academics with specialisation in academic leadership. Ideally, administrators, managers and leaders of higher education institutions, including universities, should be ethically moulded, have high levels of integrity and demonstrate experience in leadership, management and administration, apart from being senior academics (Black 2015).

Nearly half of survey respondents pointed to the lack of academic leadership as a constraint to institutional quality assurance processes. Through the interviews, there was a view that top and middle managers do not adequately provide academic leadership, particularly in terms of quality assurance processes, due to their lack of status as senior academics and minimal knowledge of quality assurance. The TCU stipulates academic qualifications, rank and experience for top leadership in both PUs and PRUs (TCU 2014:6). Actual qualifications of deans and heads of departments in surveyed PRUs are reflected in Table 3.

Table 3: Academic Qualifications of Middle-level Managers in Surveyed Private Universities

Institution	PhDs	Deans' Academic Qualifications		Head of Departments' Academic Qualifications		
		Masters	Bachelors	PhDs	Masters	Bachelors
W	2	2	0	2	7	0
X	1	3	0	0	5	0
Y	2	3	0	2	9	0
Z	3	3	0	1	7	0
Total	8	11	0	28	0	0

Source: Field data (2012)

Only 50 per cent of those holding the position of Dean were PhD prepared, whilst this number dropped to 15 per cent at the Head of Department level. In most surveyed PRUs, academic staff not only lacked necessary academic leadership qualifications but also adequate qualifications to be academic staff. Academic staff with minimal qualifications and experience cannot provide academic leadership to the level of deanship or other leadership positions in the university. As a result, this deficit in qualifications and credentials can be expected to negatively impact on the effective practice of institutional quality assurance processes to both academic staff and students in PRUs.

Lack of Awareness Among Academic Staff and Students on Quality Assurance Issues

According to survey respondents, nearly one-third lacked awareness of quality assurance issues; as well, three out of four interviewees asserted that lack of awareness is a limitation to quality assurance processes at their PRUs. For instance, as one interviewee stated:

> …and may be lack of awareness and knowledge among stakeholders, you know QA is a new concept, the concept that is not known to many stakeholders, so when you tell individuals and particularly academic staffs may be you are supposed to do A, B, C to assure quality… in most cases they would resist and tell you that, 'we have been in this institution for years and we have never heard about that'. (QA Director PRU Z 8/5/2013)

Another participant asserted that:

> The big thing is the mindset of the people in their faculties, especially in accepting to conduct QA processes in their respective departments. Some individual teachers resist to easily accepting QA as a new culture that is to

be embedded in our departments especially when you ask people to conduct self-assessment or tracer study. (QA Coordinator PRU W26/4/2013)

These findings suggest that there is inadequate involvement of stakeholders in designing and implementation of QA programmes in PRUs. Yang (2011) identified that the lack of knowledge, values, skills and organisation to empower the stakeholders may lead to poor or unsuccessful implementation of quality assurance programmes and policies. Watty (2003) found that limited training on evaluation and peer review to improve the academic staff skills affects the implementation of self-assessment in PRUs. Creating awareness related to quality assurance policy and programmes through seminars and workshops, according to some participants, could help realise the importance of all institutional quality assurance processes and contribute to greater acceptance for implementation.

Conclusion

This study examined the institutional constraints inherent in conducting quality assurance and control processes in Tanzania's PRUs. The study revealed several institutional constraints that curtailed PRUs' efforts in effectively conducting institutional quality assurance and control processes. These constraints included inadequate funding of institutions to the departments or bureaus in charge of quality assurance activities, lack of institutional capacity in terms of adequate qualified and experienced human resources, lack of awareness among stakeholders, and poor or inadequate academic leadership with clear and viable institutional quality assurance policies.

On the basis of study findings, a number of conclusions may be drawn. First, the institutional constraints PRUs face in conducting quality assurance processes affect their effectiveness in managing the quality of higher education they provide. As some of the quality assurance processes are integral to the accreditation process, these constraints contribute to a disjoint between the expectations of TCU and the PRUs, making it difficult to regulate and monitor quality. Second, constraints on the institutional quality assurance processes profoundly affected the extent to which PRUs adequately conduct the processes. As such, deficits may undermine not only the quality of education provided by PRUs, but achievement of accreditation and reaccreditation. Finally, in order to address these constraints, intervention measures are important both at the institutional level and at the level of TCU. It is recommended that PRUs ensure budget considerations for conducting sufficient quality assurance processes as an important component of institutional reputation.

References

Badiru, E. O., 2016, 'Conducting Graduate Tracer Studies for Quality Assurance in East African Universities: A Focus on Graduate Students Voices on Quality Culture', *Journal of Education and Practice*, Vol. 7, No. 6, pp. 174–181.

Black, S. A., 2015, 'Qualities of effective leadership in higher education', *Open Journal of Leadership*, No. 4, pp. 54–66. Available online at http://dx.doi.org/10.4236/ojl.2015.4200.

Hayward, F., 2006, *Quality Assurance and Accreditation of Higher Education in Africa*, Ouagadougou.

Ishengoma, J., 2007, 'The debate on quality and private surge: a status review of private universities and colleges in Tanzania', *Boston College and Council for the Development of Social Science Research in Africa*, Vol. 5, Nos 2 and 3, pp. 85–109.

Israel, G., 1992, *Sampling the Evidence of Extension Program Impact: Program Evaluation and Organizational Development*, Florida: University of Florida.

Materu, P., 2007, *Higher Education Quality Assurance in Sub-Saharan Africa: Status, Challenges, Opportunities and Promising Practices*, Washington DC: World Bank.

Matimbo, F., 2002, *The Growth of Private Universities and Private University Colleges in Tanzania*, M. Phil. Dissertation, University of Oslo.

Sabaya, W., 2006, *Tanzania's System of Quality Assurance, Accreditation and Recognition of Qualifications in Higher Education,* A Paper presented at the International Conference on Quality Assurance and Recognition of Certificates in Africa, Nairobi, Kenya.

Simon, P., 2010, *Academic Staff Capacities and Utilization in Private Universities in Tanzania*, MEMA Dissertation, University of Dar es Salaam.

Tanzania Commission for Universities, 2012, *Universities Accreditation*. (www.tcu.tz/universities/accreditation.php.rect).

Tanzania Commission for Universities, 2014, *Quality Assurance General Guidelines and Minimal Standards for Provision of University Education in Tanzania*,2nd ed., Dar es Salaam: TCU. Available online at http://www.tcu.go.tz/images/pdf/QA%20GUIDELINES%20AND%20STANDARDS.pdf.Accessed on 9 April 2016.

Tanzania Commission for Universities, 2015, *Statistical Data of Teaching Staff in Higher Education Institutions 2015.* Available online at http://www.tcu.go.tz/images/pdf/Statistical%20Data%20of%20Teaching%20Staff%20ih%20Higher%20Education%20Institutions%202015.pdf3.

United Republic of Tanzania, 1999, *National Higher Education Policy, Dar es Salaam: Ministry of Higher Education, Science and Technology.*

United Republic of Tanzania, 2005, *Universities Act, Dar es Salaam: Government Printer*.

United Republic of Tanzania, 2011, *Universities and University Colleges in Tanzania, Dar es Salaam: Directorate of Higher Education.*

Watty, K., 2003, 'When will academics learn about quality?', *Quality in Higher Education*, Vol. 9, No. 3, pp. 14–27.

Woodward, R., 2003, Case study: Cape Technikon, Paper presented at the HEQC Quality Assurance Managers' Forum, Johannesburg.

Yang, L., 2011, 'Formal education teaching quality assurance system strategy', *Journal of Adult Education*, Vol. 2, No. 3, pp. 28–29.

Broadening Perceptions and Parameters for Quality Assurance in University Operations in Uganda

Frederick Kakembo* & Rita Makumbi Barymak**

Abstract

This article explores the stakeholders' perceptions of quality in university operations in Uganda, specifically in terms of the core functions of teaching, research and community engagement. Conceptually, universities aim to transform, modernise and develop science and technology. A review of the literature suggests that many university communities are an elite group of professors and students who live in relative isolation. Within this 'protective environment' occurs a significant research milieu which is more basic than applied and, thereby, not relevant to local systems and somewhat foreign to community members. Further, the linkage between research results and institution policy makers is minimal or non-existent. In light of this background, it is argued that typical quality assurance (QA) initiatives in many universities focus on establishing operational efficiency of conventional structures of teaching and research. The study investigates comprehensiveness of parameters used by various stakeholders to determine quality in and of university education. Making reference to community engagement as one of the universities' core functions, this study investigates whether community issues and social welfare are central in the conceiving, planning and implementing QA initiatives. Qualitative and quantitative approaches were used to generate data; specifically, questionnaires, interviews, content analysis of academic and non-academic programme and documents reviews were analysed. Preliminary findings reveal a stronger focus on conventional teaching and scholarly research than on community engagement initiatives. Conceptualisation of a quality university education by various stakeholders (students, lecturers, administration, parents and policy makers) is influenced by concerns of effectiveness and regularity of

---

*   Ndejje University, Uganda. Email: fredkakembo@gmail.com; dvc@ndejjeuniversity.ac.ug
**   Ndejje University, Uganda. Email: barymaks@yahoo.co.uk

activities at the universities. Monitoring and evaluation activities emphasise: a) effectiveness of teaching and learning; b) relevancy of academic programmes to job-markets; c) quality of basic research; d) number of publications in accredited international journals; and e) concerns regarding ranking of the university relative to others in the country, region, continent and the globe. A lack of emphasis on community engagement initiatives could be explained by the fact that a number of practitioners could be products of the same existing structures and may not be in position to detect the discrepancies. Conversely, local communities, within which these institutions operate as expected immediate beneficiaries, often perceive universities as abstract institutions for the super-elite, and that the 'ivory tower' has little applicability to the day-to-day lives of grassroots communities. It is proposed that debates and dialogues should be organised to engage various stakeholders in re-definition of expectations, duties and responsibilities of higher education in relation to community engagement.

Key Words: community-engagement, parameters, perceptions, quality assurance, university

Résumé

Le présent article examine les perceptions par les parties prenantes de la qualité dans le fonctionnement des universités en Ouganda, notamment en ce qui concerne les fonctions essentielles d'enseignement, de recherche et d'engagement communautaire. Conceptuellement, les universités ont pour objectifs de transformer, moderniser et développer la science et la technologie. La revue documentaire indique que beaucoup de communautés font partie du groupe d'élite des professeurs et des étudiants qui vivent relativement isolés. Cet « environnement protecteur » est un milieu de recherche très important qui est plus fondamentale qu'appliquée et donc, pas adéquate pour les systèmes locaux et quelque peu étrangère aux membres de la communauté. Mieux, le rapport entre les résultats de la recherche et les décideurs de l'institution est minimal ou inexistant. Eu égard à cette réalité, on soutient que les initiatives d'assurance qualité (AQ) typique dans beaucoup d'universités mettent l'accent sur la mise en place d'une efficacité opérationnelle des structures conventionnelles d'enseignement et de recherche. L'étude examine l'exhaustivité des paramètres utilisés par les différentes parties prenantes pour déterminer la qualité dans et de l'enseignement universitaire. Faisant référence à l'engagement communautaire comme l'une des fonctions essentielles des universités, la présente étude examine l'importance des questions communautaires et du bien-être social dans la conception, la planification et la mise en œuvre des initiatives de l'AQ. Les approches qualitatives et quantitatives étaient utilisées pour générer les données; particulièrement, les questionnaires, les entretiens, analyse des contenus des programmes académiques et non-académiques et les revues

documentaires ont été analysés. Les résultats préliminaires indiquent une forte priorité sur l'enseignement conventionnel et la recherche académique plutôt que sur les initiatives de l'engagement communautaire. La conceptualisation d'un enseignement universitaire de qualité par les différentes parties prenantes (étudiants, professeurs, administration, parents et décideurs) est influencée par les préoccupations d'efficacité et de régularité des activités dans les universités. Les activités de suivi-évaluation sont axées sur: a) l'efficacité de l'enseignement et de l'apprentissage; b) la pertinence des programmes académiques par rapport aux marchés de l'emploi; c) la qualité de la recherche fondamentale; d) le nombre de publications dans les revues internationales accréditées; et e) les préoccupations relatives au classement de l'université par rapport aux autres dans le pays, la région, le continent et le monde. Le manque de priorité sur les initiatives d'engagement communautaire pourrait s'expliquer par le fait qu'un bon nombre de praticiens pourraient être des produits des mêmes structures existantes et ne pas être en mesure de détecter les disparités. Inversement, les communautés locales, au sein desquelles ces institutions fonctionnent comme des bénéficiaires immédiats perçoivent souvent les universités comme des institutions abstraites pour la super-élite, et que la « tour d'ivoire » n'est pas très applicable à la vie quotidienne des communautés locales. Il a été proposé que des débats et des dialogues soient organisés pour engager les différentes parties prenantes dans la redéfinition des attentes, des obligations et des responsabilités de l'enseignement supérieur vis-à-vis de l'engagement de la communauté.

Mots clés : communauté-engagement, paramètres, perceptions, assurance qualité, université

Introduction

The threefold function of universities includes teaching, research/innovation and community engagement (CE). Conceptually, universities aim to transform, modernise, and develop societies technically, socially and economically. Universities are expected to make significant economic contribution to local, national and regional economies; they are employers, customers, as well as suppliers of goods and services. Staff and student expenditures have a direct effect on income and employment. Along with teaching and research innovations, CE is widely recognised as the third core function of universities (Duke 2008; Goddard 2007). However, of these three functions, CE is given suboptimal attention. As suggested by Perry and Menendez (2011), many university communities are a closed group of professors and students living in relative isolation. By losing grounding within social needs, students, and the faculty fail to understand the challenges and opportunities and are often perceived as less than essential. This study specifically focuses on CE as an area of function, which is commonly given less attention across the functional triad.

CE is conceptualised as the establishment of formal or informal networks, collaborations, partnerships, interactions and joint activities between universities and community agencies at local, national, regional and international levels. Activities are expected to promote technical and social networks, joint projects, memorandums of understanding (MOUs), business ventures, co-sponsored workshops/seminars/conferences, sports events and other benefits. CE may potentially facilitate partnerships among universities, private sector, civil society, and government agencies. CE is expected to facilitate symbiotic relationships between universities and communities, leading to sustainable socio-economic development. In the ideal symbiotic relationship, communities provide human resources for university systems to foster and carry out their purposes. In turn, universities produce skilled manpower and innovations to address challenges in the community. However, this ideal relationship may not occur when CE is considered as an afterthought, or not attended to at the level of teaching and research (Jacob *et al.* 2015).

In light of the above, it is argued that the centrality of CE in developing relationships between universities and communities has not been sufficiently appreciated by the diverse stakeholders of university operations. As such, this study explores stakeholders' perceptions towards CE to determine whether CE is one of the parameters used to determine QA for university education in Uganda. Using the framework described herein, features of CE as predominant in university routine programmes will be analysed and discuss whether CE is given proportional attention as an aspect of QA in Ugandan universities.

Conceptual Framework

Rationale for Community Engagement

CE is expected to generate organic linkages between university and community agencies, such as government, civil society business, industry. The needs of society present opportunities for first-class research and innovation in which community agencies are able to seek consultancy. In the context of constrained universities' funding, such linkages enable universities and staff to diversify their funding. Universities' human and physical resources are optimally utilised through entrepreneurial models of research and development projects. University human resources are useful for central and local governments who may not have sufficient capacity to fill the demand–supply gaps in delivery of social services (Kakembo 2012). This gap can be addressed only when operations of universities are broadened beyond teaching and academic research.[1] In the arena of CE, universities need partners and collaborators who bring a clear

understanding of community needs and issues. With wide experiences, practical approaches, and social networks, partners bring legitimacy as they are assumed to represent a long-term commitment to local communities.

Conceptual Framework

Most activities in universities focus on two functions: teaching and, to a more limited degree, research. It was therefore argued that QA initiatives in universities focus only on ascertaining operational efficiency of the conventional structures for teaching and research. This study seeks to identify pillars and indicators of quality considered by stakeholders in university operations. The study investigates whether QA parameters are broad enough to encompass the three functions of teaching, research and CE. Specifically, the study sets out to determine whether teaching and research are organically linked to address the needs of local communities. As pointed out by Strum *et al.* (2011), CE is likely to attract less attention in universities if staff promotion and tenure rewards are only pegged to research and teaching outputs. The investigation of whether CE constitutes a significant portion of QA parameters is considered at various levels of university management: i) faculty level; ii) university level; iii) national (National Council for Higher Education [NCHE]) level; and iv) regional (Inter-University Council for East Africa [NCHE]) level. For each of the levels, checklists of specific parameters of QA were developed. The parameters and criteria are described below.

Table 1

Level	Parameters
Faculty	Research and projects are intimately linked to local communities; gradual drifting from purely academic focus towards a strong market-driven entrepreneurship; teaching, research and projects are linked to national and international business community needs, demands and trends; CE reflected in the routine activities of the faculty; academic programmes organically linked to socio-economic structures of society; research agendas defined or influenced by needs of communities and community agencies; research initiatives providing remedies to community challenges; entrepreneurial models of research; going beyond academics and publication in prestigious journals; needs of society influencing curriculum development and reviews.

University	University flexibility to establish an entrepreneurial relationship with communities; networks and symbiotic relationships between university and community agencies; benevolent co-existence with neighbouring communities and shared visions and mutual respect; sustainable bridges between universities and local leaders; policies supporting entrepreneurial structures in the university; number of memoranda of understanding between university and community agencies; community-based projects undertaken by university; university influence on community within vicinities and outside the neighbourhood; networks/connections established by the university with national, regional and international communities; stakeholders' involvement in various aspects of university life; tangible community benefits from the university; existence of linkages between university, government, civil society and industry involvement; streamlined programmes for service-learning; participation of university in evidence-based policy making; research/innovations disseminated in local media (print, radios, television, village exhibitions) in user-friendly formats; budgetary and time allocations devoted to CE.
Nche	Facilitation of strategic partnerships, alliances, and consortiums between universities; facilitating of institutional frameworks and supportive policies on university CE; sustainable linkages between universities and communities; building of bridges between universities and private sector and/or industry, government agencies, civil society and grassroots communities; institutional and policy frameworks supporting CE initiatives.
Iucea	Facilitated networks among regional universities and between EA universities and global institutions; forums on academic/non-academic matters on higher education in East Africa; facilitation/maintenance of internationally comparable education standards in East Africa; policies that encourage stronger links between universities and regional economies; institutional and policy frameworks supporting CE initiatives.

Materials and Methods

In reference to the universities' core function of CE, this study seeks to determine if the parameters described in the previous section inform QA initiatives.

Qualitative and quantitative approaches are used to generate data and, in particular, the following methods are employed: questionnaires, interviews, and documentary analysis of academic and non-academic programmes. Data for this exploratory study were obtained through in-depth interviews of university staff, including lecturers, administrators and QA officers. Data from two public universities and four private chartered universities are used for this analysis. The interviews generated detailed information regarding the perceptions of university staff on CE in relation to QA. Limitations in funding and time restrictions necessitated that key stakeholder interviews included only those from within the institutions. Inclusion of additional respondents from outside the universities could significantly generate further insightful findings, and should be considered for further research. Additional information was obtained through documents analysis, involving the review of records at universities and in publications at the IUCEA and NCHE of Uganda. The document review was limited to published sources as opposed to grey literature. A comprehensive review of diverse records and documents from the offices of the IUCEA and NCHE are also considered important to provide further insight.

The comprehensive list of parameters that constituted the conceptual and analytical frameworks was compiled from the NCHE and IUCEA documents, along with further documentation retrieved from individual universities. University documents included policies, statutes, minutes of meetings, records in the QA offices and other material that were routinely used in monitoring and evaluation. These documents conceptually represent the ideal standard for the universities, including the emphasis each university and coordinating body invested in various aspects of university programmes.

Findings

Coded data were sorted and compiled using SPSS© v.20 for the quantitative data analysis, while qualitative data was transcribed and analysed with the assistance of NVIVO© software. The findings of this study reveal that university systems in Uganda have not yet developed elaborate structures for CE, hence, their assessment and monitoring systems are not comprehensive to address a wider spectrum of QA. The study sought to determine whether the three university functions are addressed in equal proportions, and if the functions are compartmentalised or integrated in practice. In this regard, the ideal environment would support a seamless integration of teaching, research, and CE in such a way that there is no dividing line between them. Within the few universities that were studied, data clearly confirmed that the understanding of QA is influenced by concerns of effectiveness and regularity of teaching and research.

Structures for the Three Functions

The analysis revealed that more attention was paid to teaching and research than to CE activities. This finding is supported by the suboptimal attention paid to CE as reflected in the structure of academic and non-academic programmes at the universities. Analysis of schedules and calendars revealed that CE was not programmed. Information obtained through in-depth interviews with key respondents at the universities confirmed this finding. It was suggested that activities associated with CE did not have budgetary and time allocations. In addition, there was a noticeable absence of directorates or departments of community service, nor any officers charged with CE programmes. On the other hand, research has fully fledged directorates or departments, while the teaching function received the greatest financial and time allocations as considered as the core function of universities. On the few occasions where evidence indicated universities conducting the three functions of teaching, research, and CE, the activities were not integrated and were considered as separate and independent activities.

Academic Credits

Research activities conducted by students and staff receive academic credits, which complement the credits obtained in tests and examinations. Some of the respondents perceived CE in terms of internships – which reflects a narrow understanding of the wide spectrum of CE. At Makerere University (MAK), it is officially documented that staff involvement in community service programmes is one of the parameters for promotion. However, promotions and contract renewals are granted without engagement in CE activities, while giving emphasis to evidence of publication in internationally accredited journals.

Research, Dissemination and Diffusion of Innovations

Findings obtained from academic institutions suggest that most of the research carried out in universities is significantly academic oriented, and mainly used for academic fulfilment. The motivation for conducting research for students is to gain credit for academic qualifications; whereas academics conduct research in order to secure academic growth and promotions. As such, research agendas are rarely influenced by local community needs. It is uncommon for non-academic staff to conduct research, even when baseline information is required to improve work outcomes. Research is understood strictly for academic staff promotions. Research findings conducted by academic staff are disseminated in internationally accredited journals primarily from

Europe and America, yet publication of findings is conspicuously absent in local media. Publications are produced in formats not user-friendly to community agencies, such as investors, industrialists, local government, civil society and grassroots communities. Publication of articles in local newspapers or academic-oriented television or radio programmes was not considered 'academic' as the publication is not peer reviewed, and does not earn academic credits. In many universities, publication is not one of the major requirements for promotion of non-academic staff. There is also limited exposure to research for students other than through participation in college open days and exhibitions where research innovations are displayed.

Stakeholder Conceptualisation of CE

When asked to describe aspects of on-going community initiatives, many respondents made reference to common forms of service-learning, such as practicum and internships, 'school practice' for teachers, field trips/studies, and industrial attachments – all of which focus on academic purposes and benefit the university and students only. Few academic programmes practise field-based learning. A few respondents understood CE in terms of the business opportunities the university provides to individuals within the vicinity. Other respondents understood CE in terms of jobs, services and benefits provided at university facilities, such as: agricultural demonstration farms; university-operated medical-schools/facilities with health services; immunisation, screening programmes for HIV and cancer; security provided by the university police; educational services for children in the vicinity, including university-operated nursery/kindergartens; 'social' lighting systems provided by the university; and the occasional safe-water provision. In context of the conceptualised description of CE, the benefits cited by the respondents are simply the spillover and spontaneous outcomes of the presence of the university in the vicinity. CE should, by its definition, involve deliberate development of networks, collaborations, partnerships, interactions and joint ventures between universities and community agencies.

Ideal Practices of Community Engagement

There are specific activities in some universities that were consciously developed to enhance CE. For instance, in Uganda Christian University, there is a programme known as 'Justice Mission' which extends legal services to less-privileged sections of society specifically in matters of land cases, writing wills and human rights issues. Also, in Ndejje University, there is a non-academic programme referred to as 'Block-Placement' that involves students of social work, social administration and agriculture sent to villages to serve

in communities. The programme is mutually beneficial. The students teach some basic skills to communities and help in the marketing of farm products. Communities benefit from the new methods of work introduced by the students, while students become acquainted with socio-cultural norms and work ethics of the communities.

Student-operated Community Engagement Initiatives

There are several students' clubs and associations that deliver services to communities, typically on a voluntary basis. Information from universities, however, indicates that student activities receive limited technical, moral and financial support from university management. The clubs include, among others, Rotaract clubs, cultural associations, Red Cross, course-professional clubs, and religious-based clubs.

Community Involvement in University Activities

Instances of community involvement of organisations from outside the university interacting with the university staff may include consultations with professional bodies, such as medical fraternities, the Law Society, business and accounting bodies. The services of such bodies are specifically needed during curriculum development and review. However, practical collaborations with industry, central/local government and civil society are not common. Exceptional cases are partnerships with international donor non-government organisations, who provide research and project funding for community-based research or intervention projects. The relationship however is one of patronage whereby donors dictate the agenda and direction of research projects.

At MAK, policies, organisational structures and guidelines for field work are created, and stipulate respecting what external partners can do (Makerere University, 2011). At both Makerere and Ndejje universities, students are assigned field supervisors based at the organisations where internships are conducted, and duties involve the assessment of students' daily progress and writing of assessment reports. Occasionally in MAK, company employees are assigned the tasks of co-supervisors or appraisers of students' research where data are collected from these organisations.

Public universities often involve external communities in decision-making processes. The membership of the university councils includes, among others, representatives of certain external communities such as Ministries of Education and Sports. The mission statement of MAK focuses on: 'Providing innovative teaching, learning, research and delivery of services responsive to national and global needs' (MAK 2008). The university's strategic plan (2008/09–

2018/19) embraces partnerships and networking as a core function of the university (MAK 2008). An administrative unit in charge of partnerships and collaborations exists to link MAK to the public and private sectors. It is known as the Makerere University Private Sector Forum (MUPSF).

From the foregoing descriptions, it is evident that CE is not well conceptualised by study respondents. Equally, there is scanty evidence of structures and systems to support and sustain CE within the institutions. In such an environment, it is unlikely that CE may constitute aspects of parameters for determining QA.

Community Engagement and Quality Assurance Initiatives

All the universities involved in the study had QA structures such as offices and personnel. However, the complexity of QA structures varies from one university to another. At the time of this study, Ndejje University had a part-time QA and an academic auditor; Nkumba, Bugema and Uganda Christian Universities had fully fledged QA directorates. The description in the following sections situates CE within the existing QA structures of the universities investigated.

Faculty and University-level QA Initiatives

The activities associated with QA across universities were centered on: a) monitoring and evaluating effectiveness of teaching and assessments; b) determining relevancy of academic programmes to job markets; c) quality of academic research; d) number of publications in accredited international journals; and e) concerns over ranking of the university in relation to other universities in the country, in the region, continent and the globe. QA also revolved around monitoring of student welfare services, public relations functions, sports, recreation, library and internet facilities, and other basic facilities that promote teaching, research and general student welfare. Within the studied universities, QA is clearly influenced by concerns of effectiveness and regularity of routine activities of teaching, research, and student welfare services. CE does not feature prominently in these monitoring and evaluation frameworks.

Features of CE in QA frameworks can be seen in staff promotions. In principle, the contribution of academic staff to CE is one consideration for promotion to senior lecturer, associate professor and professor. For example, the policies on the appointment and promotion of academic staff at MAK identify four required tasks: teaching, research, service and leadership in the university, and professional service including providing service to the community (MAK 2009). The points-based faculty evaluation system at MAK (2013) is weighted as follows: publications (25); academic and professional qualifications (20);

teaching ability and experience (13); supervision of students' research (10); research (8); other academic activities (8); service to the university and the community (5); conduct (5); membership of professional bodies (2); professional practice/outreach services (2); and innovations, including patents(2). Some respondents expressed the concern that staff involvement in CE is not as valued as is teaching and research functions.

Students interviewed reflected similar concepts of QA to those of the lecturers. Their perceptions of QA revolved around: having regular lecturer attendance; fair conduct of assessments (tests and examinations); delivery of social services (accommodation, dining, sports, entertainment and recreation, etc.); and availability of facilities in the library and computer laboratories. Students indicated that they are occasionally concerned about marketability of academic programmes and reputation of their university at the national level. The latter is closely related to future successful engagement in the competitive job market.

Other key stakeholders, such as employers, local leaders, policy makers, parents, members of university councils, members of founding bodies, members of professional bodies and other persons who are central in university operations, although valuable, were not interviewed for this study due to funding limitations. Insights generated by these groups of stakeholders are likely to shed more light on the understanding of universities' QA initiatives.

NCHE's QA Parameters on Community Engagement

Information regarding perceptions and parameters for QA at the national university coordinating level (NCHE) was obtained through a document analysis. For purposes of analysing NCHE QA parameters, reference is made to the Quality Assurance Framework for Universities and the Licensing Process for Higher Education Institution (January, 2014). The institution-audit criteria developed by NCHE highlights eight pillars of QA. The eighth pillar is 'University and Community Services' and is specifically described as: a) the needs of the community, market and general society which universities ought to address; b) the effectiveness of internship programmes; and c) communities participating in university activities. This pillar is a point of departure for communicating what the NCHE considers as ideal standards. However, within the checklist that outlines capacity indicators for assessment of programmes, including thirteen items and thirty-three sub-items, no reference is made to CE activities. It is likely that many universities will focus on the checklist requirements to determine what NCHE expectations are. Given that the checklist excludes a direct reference to CE, universities, particularly those with financial constraints, are likely to neglect CE issues.

IUCEA's QA Parameters on Community Engagement

Similar to the NCHE, only documents obtained from the organisation's website were analyzed to investigate the perceptions and parameters of the IUCEA on QA with regard to CE, and specifically, the checklist of programme quality. A content analysis of the self-assessment report at programme level reveals that the eighteen items and seventy-six sub-items do not make specific reference to CE initiatives.

If universities in Uganda rely solely on the cited documents of these two coordinating levels (NCHE and IUCEA) to guide their QA initiatives, gaps for CE will emerge. This has significant implications for universities, particularly those that are not financially well resourced, as a natural pretext for omitting CE from their routine activities. Coordinating bodies have programmes positioned to transform the concept of university CE at country and regional levels. One such example is the 'Academia-public-private partnership forum and exhibitions' organised by the IUCEA, and supported by various local and international organisations (including the 2015 Forum sponsorship by the East African Business Council (EABC) and East African Development Bank (EADB) held in Entebbe). Such initiatives promise to create platforms where universities, private sector and governments share insights on integrated sustainable partnerships.

Summary of Findings

Study findings suggest that many universities fail to allocate proportional financial and time resources to CE, which encompasses one of three core functions of the university. Even the sphere of research, which is an area of emphasis, was found to lack relevance to social needs, and is typically more basic than applied science, and not relevant to local production systems. Research is driven by career-driven expectations to publish in prestigious journals and may not value studies that document local content. The conceptualisation of CE by staff of universities is very narrow. Equally, many universities lack structures and personnel for operating and sustaining CE initiatives. Within such a context, CE is not a prominent feature or parameter for university QA operations. Nonetheless, there are examples in some universities and at regional university coordinating agencies that aspire to enhance CE activities.

Discussion

Conceptually, CE requires proportional allocation of time, human, material and budgetary resources for initiatives that connect the university to communities and community agencies. Perceptions and parameters for QA activities need

to be broadened beyond teaching and research in order to explore ways in which the three functions could be seamlessly integrated. The following section discusses the issues, prospects and challenges of broadening QA perceptions and parameters beyond teaching and academic research.

Broadening the Stakeholder Base

Developing effective CE initiatives begins with stakeholder mapping and analysis. While some university stakeholders could be considered primary, others may be peripheral. Primary stakeholders include: a) founding bodies; b) parents/students; c) local/central government; and d) neighbouring communities. Peripheral stakeholders and their attachment with the university could be described as temporal and opportunistic, including the media, as well as business and service sectors. There is a wide spectrum of relationships that exist among the various stakeholders, ranging from personal networks to long-term sustainable initiatives. Preliminary findings suggest that perceptions of university functions in CE vary among stakeholders. CE calls for frameworks and models to link local governments and industries (Khan and Park 2011). Flexibility on the part of the universities is also required in order to forge entrepreneurial relationships with communities and community agencies (Etzkowitz 2012). Universities should consider organising open forums where identified stakeholders brainstorm on various developmental issues, challenges and prospects. The views of the diverse stakeholders should be sought, while setting parameters for determining QA in the universities. For instance, diverse stakeholders should assess how components of teaching, research and innovations can meet their specific needs. Identification of indicators by industrial and business communities can be supported through the research function of the university to generate market-based technological prototypes.

Broader Spectrum of University Community Engagement

Initiatives to promote CE should start with the faculties, progress to university and later shift to NCHE level. At the latter level, governments could promote CE by providing special funding and policy guidelines. Existing Ugandan government initiatives in this direction are demonstrated by the National Development Plan, 2010/11–2014/15 and the National Science, Technology and Innovation Plan, 2012/2013–2017/2018. However, as pointed out by Cloete, Bailey, Bunting and Maassen (2011), having policies and plans does not necessarily translate into tangible practices for CE. Once NCHE-level initiatives for CE are established, they can transcend national boundaries and meld into the structures of the IUCEA. With over 200 higher education institutions in East

Africa, CE is potentially enhanced by a wider network of universities and their corresponding community agencies (i.e., private sector agencies, government departments, business communities, industries, civil society).

Research Community Service and QA

Quality in research and scholarship is largely perceived through a foreign lens in Uganda, and not through local societal opportunities, needs and challenges. A segment of local research and scholarship activities is influenced by the imperative of *publish or perish*. Appointment, promotion and contract renewals in many universities are linked to publishing in refereed and reputable journals. Some journals may not value studies that document local content. Consequently, researchers often publish 'for foreign consumption' rather than striving to address local needs. As well, research and project proposals target external funders and ignore existing funding opportunities from local industries and businesses. Local industry and business firms rarely invest significantly in research without evidence that university-based research is relevant to the local production systems. As such, scholarship and research programmes continue to face shrinking budgets, low staff allowances and inadequate facilities. Governments have adequate financial resources to solely support academic research, while the current structure of university research and scholarship promise limited impact on the lives of the people governments are expected to serve. Developing strategic links between university, business, and industry could therefore be one of the practical remedies for enhancing quality and sustainability of local university operations.

CE and University Funding Diversification

Initiatives to propagate CE in universities may erroneously be perceived as an added expectation imposed on the university by the national or regional coordinating authorities. On the contrary, CE is an opportunity for the university to radically transform existing funding and networking structures. CE creates opportunities for universities and community agencies based on mutual exchange of knowledge and resources (Carnegie Foundation for the Advancement of Teaching 2010). Partnerships and collaborations are positioned to resolve the critical funding gaps that many universities are currently experiencing (Hart and Northmore 2011; Pike, *et al.* 2011; Soska and Butterfield 2004). Partnerships and collaborations are a key to long-term sustainability of quality operations in universities, and universities in Uganda are yet to play a central in the processes of evidence-based policy making.

Symbiotic Nature of Partnerships

Community engagement' denotes a two-way dialogue between universities and community agencies. Existing patterns are characterised by a patronage relationship. On rare occasions when university – community interactions take place, the relationship is one of a deficit model. The community is seen as a laboratory for university researchers to 'generate new knowledge for purposes of staff promotion or higher degrees for students' (Perry and Menendez 2011). The knowledge is presumably used to 'address community needs' but, in reality, serves the purposes of staff promotion and higher degrees for students. Full benefits can only materialise if the university and society are organically linked; when needs of society are at the centre of the university's activities. While university outreach involves a one-way process of transferring knowledge and technology to communities, CE recognises that external communities also have something to offer to universities. As Tagoe (2012) remarks, there is a need for a drift from unidirectional engagement in which communities are considered 'pockets of need and laboratories for experimentation' and towards bidirectional engagement. Communities are no longer 'passive recipients' of university expertise. Besides the potential funding opportunities that they may offer, communities also have knowledge reserves that universities could access. The entrepreneurial model of research and innovation entails that universities go beyond teaching and research, towards the welfare of their communities (Etzkowitz 2002). It is proposed that the research agendas of universities should be defined by interaction and negotiation with community agencies.

Facilitators and Barriers for CE

Sutz (2005) points out that, in many developing countries, small-scale collaborations between researchers and industry have failed to grow into national trends. The development of effective CE by universities calls for diverse stakeholders to buy in with full participation in all sections of the university administration and university programmes that are relevant to community needs. Relevancy is one of the parameters that QA initiatives are necessary to uphold. Reasons for failed higher education CE initiatives may include a lack of support and buy-in from one or more key stakeholder groups, such as students, faculty members, staff, administrators, alumni, parents of students, policy makers and community members. On the part of the faculty, Strum *et al.* (2011) support the view that success of CE initiatives necessitates an expansion of the traditional reward structure that is based on quality research and teaching outputs, whereby staff promotion and renewal of contracts centre on staff involvement in CE. As pointed out by Beere, Votruba and Wells (2011), organisational factors, such as policies, structures and programmes, impact

the institutional commitment to CE. Specifically, CE could be facilitated by specialised and multidisciplinary units designed to coordinate community-related activities and services.

Compatibility

One of the barriers for the development of partnerships between universities and community agencies is the lack of compatibility. The university faculty may not rhyme well with the rigorous work schedules of private sector, non-government and community based organisations. Work schedules of the latter are characterised by regular report making, effective communication, cooperation, tight accountability, willingness to compromise and flexibility. These virtues do not augur well for the faculty which is relatively autonomous. The lack of openness on part of the university faculty is one of the structural limitations that community agencies highlight. University information is often not accessible, with a lack of transparency (Hallak and Poisson 2007). On the other hand, the university faculty also experiences challenges interacting with community agencies. Community partners are occasionally unaware of the workload and constraints faced by the faculty. Officers in community agencies also often have unreasonable expectations about the type and amount of work a faculty member can devote to an individual project. To aggravate matters, university faculty members are accustomed to strong disciplinary boundaries of departmental and college structures that it are often difficult to work under in multi-disciplinary, integrated and collaborative work required by community agencies.

Institutional, National and Regional Leadership

Community engagement initiatives call for committed leadership on the part of faculties, individual universities, national councils of higher education and the IUCEA. At the regional level, partnerships may be sustained by the information communication technologies (ICT) that provide essential platforms for promoting outreach initiatives (Beere *et al.* 2011; Brukardt, Holland, Percy and Zimpher 2006) and fulfil the key indicator for the university institutional commitment to CE.

Conclusion

The three-fold mission of higher education places an emphasis on the synergistic relationship that strengthens the three functions, namely, teaching, research and CE. Broadening perceptions and parameters for QA require that there is organic linkage between the three core functions of the university. Moreover,

incorporating CE into teaching and research activities encourages the interaction between specialised units and traditional academic units. Quality assurance instruments can serve to determine whether components of the research agenda provide remedies to societal needs. Research and innovation are in the position to be disseminated and diffused in local platforms in user-friendly formats and local expressions. However, the lack of emphasis on CE initiatives may be explained by the fact that a number of practitioners are the product of existing structures, and therefore may not be in position to detect discrepancies. On the other hand, local communities, as expected immediate beneficiaries, perceive universities as abstract institutions for the super-elites, within the 'ivory tower' that has relevance to the day-to-day lives of grassroots communities.

Universities are wise to increase the adoption of CE initiatives and engage diverse stakeholders as central to the operations of universities, while university management reflects upon funding and networking opportunities present with increased CE. Considerations to organise open forums where identified stakeholders brainstorm on various developmental issues, challenges and prospects, and become directly involved in QA initiatives will identify emergent research needs. Specified duties, responsibilities and expectations of various stakeholders towards universities may also effectively monitor QA measures. In addition, universities that do not currently have structures for CE can begin through the promotion of student-operated CE initiatives, including Rotaract Clubs, cultural associations, Red Cross, professional clubs, religious-based clubs, etc. Finally, the development of local parameters for ranking universities within East Africa is an important role for national and regional university coordinating bodies, such as the NCHE and IUCEA, with CE as a prominent feature used in the ranking system. Engaging various stakeholders in developing these QA initiatives is important in consideration of the diversity in terms of levels of education, various interests and geographical constituencies of institutional stakeholders in this endeavour.

The primary limitation of this study is the exploratory nature of the work and the limited sample available for data collection. Increased funding for this area of research will result in more comprehensive findings. Broadening the diversity of the research team, the inclusion of additional universities and a greater diversity of organisations and respondents, such as the private sector, employers, parents, government departments and civil society will increase the applicability of the work, and increase the attention to the importance of CE in QA measures of academic institutions.

Note

1.   See H. Etzkowitz, 2002, *MIT and the Rise of Entrepreneurial Science*, London: Routledge Press.

References

Beere, C., Votruba, J., and Wells, G., 2011, *Becoming an Engaged Campus: A Practical Guide for Institutionalizing Public Engagement*, San Francisco, CA: Jossey–Bass.

Brukardt, M., Holland, B., Percy, S., and Zimpher, N., 2006, 'The path ahead: What's next for university engagement?', In: S. Percy, N. Zimpher and M. Brukardt, eds, *Creating A New Kind of University: Institutionalizing Community–University Engagement*), Boston: Anker, pp. 242–259.

Brukardt, M.J., Percy, S.L. and Zimpher, N.L. 2006. 'Moving forward along new lines'. In: S. Percy, N. Zimpher and M. Brukardt eds. *Creating a New Kind of University: Institutionalizing Community-University Engagement*. Boston: Anker, pp. 3–22.

Carnegie Foundation for the Advancement of Teaching, 2010, *The Carnegie Elective Classification for Community Engagement: 2010 Documentation Framework Preview*. (http://classifications.carnegiefoundation.org /downloads/2010-Documentation-Reporting-Form-PREVIEW-v2.pdf). Accessed 13 August 2016.

Cloete, N., Bailey,T., Bunting, I., and Maassen, P, 2011, *Universities and Economic Development in Africa: Key Findings*, Cape Town: CHET.

Duke, C., 2008, 'University engagement: avoidable confusion and inescapable contradiction', *Higher Education Management and Policy*, Vol. 20, No. 2, pp. 87–97.

Etzkowitz, H., 2002, *MIT and the Rise of Entrepreneurial Science*, London: Routledge Press.

Goddard, J., 2007, 'Supporting the Contribution of HEIs to Regional Development: Outcomes of the OECD Review Project of 14 Regions in 12 Countries', Paper presented at the OECD/IMHE Conference, Valencia, Spain, 19–21 September 2007.

Hallak, J., and Poisson, M., 2007, *Corrupt Schools, Corrupt Universities: What can be done*? International Institute for Educational Planning, UNESCO.

Hart, A., and Northmore, S., 2011, 'Auditing and evaluating university–community engagement: lessons from a UK case tudy', *Higher Education Quarterly*, Vol. 65, No. 1, pp. 34–58.

Jacob, W., Sheng, Y., and Porter, M., eds, 2015, *Indigenous Education: Language, Culture, and Identity*, Dordrecht: Springer.

Kakembo, F., 2012, 'Innovative education and training for community-based water protection units', *Water Practice and Technology*, Vol. 7, No. 4, p. 94.

Khan, G., and Park, H., 2011, 'Measuring the triple helix on the web: longitudinal trends in the university-industry-government relationship in Korea', *Journal of the American Society for Information Science & Technology*, Vol. 62, No. 12, pp. 2443–2455.

Makerere University, 2013, *Makerere University Annual Report 2012: Enhancing Partnerships for Teaching, Research and National Development*, Kampala, UG: Makerere University Planning and Development Department.

Makerere University, 2008, *Strategic Plan 2008/09–2018/19*, Kampala: Makerere University Planning and Development Department.

Makerere University, 2009, *Policy on Appointment and Promotion of Academic Staff*. (http://policies.mak.ac.ug). Accessed on August 1, 2017).

Makerere University, 2011, *Guidelines for Field Attachment*. (http://policies.mak.ac.ug/). (Accessed on August 1, 2017).

Perry, D., and Menendez, C., 2011, 'Impact of institutions of higher education on urban and metropolitan areas: assessment of the Coalition of Urban and Metropolitan Universities', *Perspectives in Health Information Management*, No. 10, Fall, p. 1.

Pike, G., Kuh, G., and McCormick, A., 2011, 'An investigation of the contingent relationships between learning community participation and student engagement', *Research in Higher Education*, Vol. 52, No. 3, pp. 300–322.

Soska, T., and Butterfield, J., eds, 2004, *University–Community Partnerships: Universities in Civic Engagement*, Binghampton: Hawthorne Press, Inc.

Strum, S., Eatman, T., Saltmarch, J., and Bush, A., 2011, Full participation: building the architecture for diversity and community engagement in higher education, *Imaging America*, Paper 17. http://surface.syr.edu/ia/17

Sutz, J., 2005, *The Role of Universities in Knowledge Production*. (http://www.scidev.net/global/policy-brief/the-role-of-universities-in-knowledge-production-.html). Accessed on August 1, 2017.

Tagoe, M., 2012, 'Incorporating community service learning into university-based adult education in Ghana'; In: J. Preece, P. Ntseane, O. Modise, and M. Osborne, eds, *Community Engagement in African Universities: Perspectives, Prospects and Challenges*, pp. 179–196, Leicester, UK: National Institute of Adult Continuing Education University.

Student Evaluation of Teaching: Bringing Principles into Practice

Geoff Tennant* & Tashmin Khamis**

Abstract

Student evaluation of the teaching process is an important quality assurance tool with the potential to give data that can be used to inform the development of courses and guidance of instructors. They have become increasingly important in western countries over the last forty years or so as their results are also used for 'high stakes' purposes. This paper examines the background of student evaluations, including reasons – sometimes conflicting – for undertaking them, choice of question items, administration, and analysis and use of results. The design of the Student Evaluation of Teaching used at the Aga Khan University is described; it looks to capture the student voice in a meaningful, helpful and proportionate manner. Data from the pilot stage, which assessed the efficacy of student evaluation of teaching, are given along with pointers for future good practices.

Résumé

L'évaluation du processus d'enseignement par les étudiants est un outil important de l'assurance qualité susceptible de fournir les données qui vont servir à orienter le développement des cours et de conseils pour les instructeurs. Elle devient de plus en plus importante dans les pays occidentaux depuis une quarantaine d'années, étant donné que ses résultats sont également utilisés dans les grands enjeux. Le présent article examine le contexte des évaluations par les étudiants, y compris les raisons – parfois conflictuelles – pour les entreprendre, le choix des éléments d'interrogation, l'administration, l'analyse et l'utilisation des résultats. Le modèle de l'évaluation de l'enseignement par les étudiants utilisé à l'université Aga Khan est décrit. Il cherche à faire entendre la voix de l'étudiant d'une manière significative, utile et proportionnée. Les données de la phase pilote, qui évaluent l'efficacité de l'évaluation de l'enseignement par les étudiants, ont été fournies avec des indications pour les futures bonnes pratiques.

* Teaching Programmes, Institute for Educational Development, Aga Khan University, Dar es Salaam, Tanzania. Email: geoff.tennant@aku.edu

** Teaching and Learning, Aga Khan University, Nairobi, Kenya. Email: tashmin.khamis@aku.edu

Introduction

Students are a key stakeholder group in higher education. Their voices legitimately need to be heard in decision making at the macro and micro level as universities work to prepare their students for the professional, social, and personal challenges of the twenty-first century.

This article is concerned with one aspect of students' voices: their evaluations of courses in which they participate. According to Morley (2014), student evaluations have been used on a voluntary basis in the United States of America since the 1920s, with increasing importance being put on them particularly since the 1970s. Examples can be found, such as Sumaedi, Bakti, and Metasari (2012) in Indonesia and Pickford (2013) in the United Kingdom, providing evidence that student evaluations are being taken very seriously. Additionally, a range of sophisticated statistical techniques have evolved to analyse these evaluation results (Morley 2014).

The Aga Khan University (AKU) is a private international university, which started in Pakistan in 1980 and expanded to East Africa in 2000. The quality of the provision of education is at the heart of the ethos of the university. Quality is privileged as one of its underlying principles along with access, impact and relevance. To facilitate shared resources and standards across its campuses, the Network of Quality Assurance and Improvement (QAI_net) was formed in 2014, along with the Network of Teaching and Learning and the Network of Blended and Distance Learning. QAI_net's work has included the developing and disseminating of a student evaluation questionnaire used on all campuses.

This paper examines the design and early roll-out of the AKU student evaluation questionnaire. It starts by going back to the beginning and asking some basic questions about student evaluations. What exactly is the purpose in administering student evaluations? What different methods are there for gathering student feedback? What can be done with the information once it has been gathered? The approach taken by AKU is then critically examined, with opportunities and challenges set out as we look to make meaningful and appropriate use of student evaluation data.

Why Undertake Student Evaluations?

First and foremost, the reason for undertaking a student evaluation of teaching exercise is to obtain feedback from students on the quality of courses and instructors. Such data can be used to inform the maintenance and improvement of the quality of courses and of teaching, as well as providing guidance and encouragement where appropriate to the faculty, based on what students are saying (e.g., Gravestock and Gregor-Greenleaf 2008).

Within the literature a number of other reasons for student evaluations are addressed. Perhaps not surprisingly, there is evidence that student evaluation is used to provide information for the promotion of academic staff (e.g., Emery, Kramer and Tian 2003) and to make decisions as to whether programmes should be allowed to continue (e.g., Pickford 2013). In addition, data are used to rank universities, the results are then published and these rankings are used by prospective students and their advisers to make informed choices about universities. For example, the National Student Survey in the UK and 'Top Universities', an international league table of universities, use student evaluations as one of their indicators (Pickford 2013; QS Quacquarelli Symonds Limited 2011). All of these reasons would come broadly under the heading of 'high stakes assessment' as for differing reasons and for differing groups of people, the results of the surveys can have significant consequences.

A key point, which underlies the rest of this paper, is that one cannot expect to simultaneously provide feedback both to produce league tables and also to improve teaching quality in a meaningful way. There is clear evidence (e.g., Pickford 2013) that, in a UK context at least, considerable efforts are put into chasing student evaluation figures for their own sake, quite apart from any underlying notion of student quality of experience. This is a point which the Aga Khan University has taken on, making it clear that the results of feedback should be used for formative purposes only with separate procedures like appraisal of the faculty used to determine summative and evaluative intents such as pay increments and promotions.

Beyond the reasons given above, it is increasingly the case that evaluations are required by national quality assurance bodies. In the UK context, the clear expectation is that students should be involved formally and informally in evaluation of teaching and other aspects of their experiences (QAA 2012). Across East Africa, with the support of the Inter-University Council for East Africa, quality assurance is becoming more formalised, with student evaluations a clear expectation of the QA framework (Cell 13, *Road Map to Quality*) (IUCEA 2010), and evidence from university websites that student evaluations are indeed being conducted in East Africa (eg., Technical University of Kenya 2015).Whilst research can easily be found on student evaluations from South Africa (eg., Atkins *et al.* 2016) it appears that research on student evaluations is yet to emerge from East Africa. This paper can therefore help set the scene for some critical work in years to come.

What Questions Does One Ask?

Underlying assumptions of any questionnaire, interview schedule or other data collection method are important. Insofar as student evaluations are

designed to uncover their perceptions of teacher quality, there is an implicit assumption of what represents teaching quality.

Shevlin, Banyard, Davies and Griffiths (2000:398) suggest that 'there appears to be little agreement on the nature and number of dimensions that represent teaching effectiveness'. This multi-dimensionality clearly matters in questionnaire design. So, whilst in isolation, asking students to agree or disagree with the statement, 'Tutorials or other individualised support offered by my university tutor(s) have met my needs',[1] would appear to be uncontroversial, there are assumptions here about what individualised support can offer. Particularly, it is perfectly possible that a student has 'needs' which this support cannot offer and this question could be taken to imply that a level of support ought to be provided which is not reasonably possible. Similarly, questions about clarity of explanation and the extent to which the learning process is straightforward could well be taken to conflict with principles of constructivist education and the notion of cognitive conflict: that real learning takes place against a background of a struggle (in a mathematics context see, for example, Von Glaserfeld 1991). It is possible to communicate the idea that if the university tutors were all doing their jobs 'perfectly' then all learning would be straightforward. This is, surely, an unhelpful message to students in preparing them to start or indeed to continue in the professional world of work.

In articulating the concept of the quality of teaching in higher education, Chickering and Gamson (1987) provide the following list of seven key attributes of good teaching that have been validated by Gibbs (2010):

- encourages contacts between students and faculty;
- develops reciprocity and cooperation among students;
- uses active learning techniques (or 'encourages active learning');
- gives prompt feedback;
- emphasises time on task;
- communicates high expectations; and
- respects diverse talents and ways of learning.

As noted below, these attributes were used as the theoretical basis for the pilot AKU student evaluation of teaching form, with a question relating to each point above.

The Briefing of Students

If the purpose of the evaluation is 'high stakes' then, as noted above, it is likely that there is pressure applied, whether internally or externally, to achieve

favourable student responses. This imperative would apply either to 'high stakes' for the institution – good student evaluation results help to ensure high positions in inter-university league tables – or for the individual tutors, if promotions, pay increments and other prospects depend on the evaluations.

If one uses the Chickering and Gamson (1987) list as a starting point for a questionnaire, then one would include a question about the timeliness of feedback. This leaves open the possibility that students have unrealistic expectations as to how quickly assessments can be marked, regardless of tutors' other commitments and procedures such as second marking. But, if tutors are operating within a stated policy and students are nevertheless feeling that it is taking too long for feedback to be given, consideration and reflection on the interpretation of this point is needed.

So, does one set out in the brief to students the policies on such matters as timing of returning of feedback? Does one remind students of sessions undertaken before they fill out evaluations for fear that they have forgotten about them? This again comes back to the purpose of the evaluation. If it is in some manner high stakes then one might well do so. If one is genuinely looking to know what students are prepared to say about the course, one leaves them to fill out the form as they see fit. And, if students say in an evaluation that an aspect has not been covered when, in fact, it has, that in itself is interesting, with potential follow-up action arising.

Many research projects are undertaken with large sample sizes and sophisticated statistical techniques (e.g., Morley 2014) which do not ask about how the evaluation was introduced. However, to enhance comparability from one group of students to another in the feedback that they give, it may reasonably be considered that the briefing given needs to be comparable.

How does One Gather Evaluation Data from Students?

Questionnaires

One common way of gathering data is through questionnaires, administered either in paper form or electronically, e.g., through the use of Survey Monkey[2] (which is free for a basic service) or Bristol Online Surveys[3] (for which a fee is payable). Whilst electronic feedback has resource implications and students may not entirely trust assurances that their evaluations are kept confidential when given in this form, (e.g., in a Canadian context Gravestock and Gregor-Greenleaf 2008) advantages include a considerable saving of administrative time in inputting data and greater accuracy in capturing student inputs.

Questionnaires: Likert Scales

Frequently questionnaires include batteries of questions for students to work through, often using Likert scales. Arguably this approach yields a large amount of information quickly which can then be analysed at greater or lesser levels of depth (e.g., Sumaedi *et al.* 2012).

Typically Likert scales have four to five points, e.g., strongly agree / agree / disagree / strongly disagree, depending on the precise wording of the opening statement. A fifth point allows for a neutral position. Whilst Likert scales get around the problem of forcing a 'Yes' or 'No' reply to questions like, 'My tutor responds sensitively to questions during sessions', it does not overcome the difficulty of different understandings of the same question. Discussion can be found on the unwillingness of participants to use the extremes of scales, with evidence that people may interpret the scales differently by gender and ethnicity (e.g., Batchelor, Miao and McDaniel 2013). This variability would appear to be an under-researched point, specifically within the context of student evaluations and, within the developing world context in which the Aga Khan University predominantly operates, being a potential area for study.

Whilst it might be considered that a series of statements to which students respond using a Likert scale gives rise to a large amount of information without taking much of the students' time, there are a number of problems arising from this approach. Evidence suggests that, when faced with a long list of questions to answer, students do not answer each item individually but give an overall impression as to how they are feeling. Emery *et al.* (2003) give an example of thirty-two students on a course not using laboratories, with only twelve of them giving 'not applicable' to questions about the laboratory work being beneficial and correlated with class and the rest proceeding with a rating. Similarly, when one of the current authors was involved in an evaluation project (Tennant 2001), evaluation forms were observed being given out sometime before the end of the day, which did not stop many participants giving a rating on events which had not, at the time of writing, actually happened. A student dissatisfied with a personal tutor may give a low rating on an item such as 'My tutor was available for individual consultations' despite the tutor being available on both a proactive and reactive basis, thus not reflecting the reason for the student's discontent.

These findings suggest that, if one is to use Likert scales on student evaluation forms, the number of items should be kept reasonably short with, if possible, big differences between the topics of questions from one to the next. Bespoke questionnaires should be asked without redundant questions (e.g., about laboratory work on courses which do not involve it), or should be 'greyed out.' At the very least, they should be discounted when analysed.

Questionnaires: Free-Text Answers

Another way of getting feedback from students is in discursive form. Whilst this, in principle, allows students to express themselves away from the constraints of answering specific questions, there are potential problems with this approach. Across AKU, students are almost exclusively non-native speakers of English, and it can be difficult to work out what it is that students are intending to say in an evaluation exercise, which, of course, does not allow for redrafting or peer group support. This potentially yields comments made by one student such as, 'He seems to be having enough and addition can easily dilute what he has'. Due to the imperative for anonymisation, it is not possible to ask the student for clarification. In addition, comments like, 'Using of relevant examples from East African context' in isolation are also problematic as we are unclear whether this approach was or was not done in the course. Another consideration is when to ask students to fill out these questionnaires; at the end of the last session with students free to go immediately afterwards is possibly not the best time. Another point, which is returned to below, is the importance of ensuring that students feel that their comments are valued.

Student Evaluations of Teaching–Learning: Other Forms

Other forms of evaluation worth considering are whole group discussions once the tutor has left the room, having appointed a chair and a secretary. Guidelines on forms of feedback are helpful, including suggesting positive future action rather than dwelling on previous perceived weaknesses. Students may be divided into small groups to discuss issues. A student representative system can also be valuable to help members of the faculty understand the student perspective.

Response to Results

Once one has results an analysis must follow, ideally with the format determined before the evaluation is conducted. Some possibilities follow.

Listen but Take no Action

One might reasonably consider that one of the purposes of student evaluations is to give students the chance to say what they want to say, essentially to 'blow off steam'. Taking initial teacher training as an example, lesson planning is extremely difficult to implement well. There can be a strong temptation to give a negative rating to an evaluation item, such as 'University sessions prepared me well for lesson planning', when, in fact, the sessions were entirely fit for purpose. The problem arguably is with the question that implies if the

university tutor is teaching properly then lesson planning will be found to be straightforward by the student teachers, when this is simply not the case.

Giving students the opportunity to give this type of evaluation may well be cathartic for them, thus fulfilling a useful purpose. Whilst one needs to be mindful that there is always room for improvement for programme provision and student learning experience, an appropriate response to this kind of feedback may well be to summarise the issue in a report but make no substantive change to the approach taken in university sessions.

Another related issue, not least in the developing world contexts in which AKU operates, is that a tutor may be looking to use teaching methods other than lecturing which may not be immediately familiar to students. As noted earlier, part of the constructivist theory of learning is 'cognitive conflict' – the process of learning may in the short, or even medium term, be uncomfortable as old, sometimes deeply-rooted ideas are jettisoned before new learning takes its place. It is possible that, in the middle of this process, students asked in an evaluation about quality of teaching will give a negative score. This is consistent with Emery *et al.* (2003) who argue that the net effect of a culture which takes student evaluations too seriously is to stultify innovation in teaching, resulting in bland, safe experiences for students.

So, if one of the purposes of student evaluation is to allow students to have their say, one needs to give them space to do this. There is a time and a place for university staff, with experience and understanding of teaching methods and the practicalities of running courses, to respectfully disagree with what students are saying, to comment on the matter in a report made to students, but to take no further action. This points, again, to the need to assess the results of Student Evaluation of Teaching (SET) in a proportionate, reflective manner.

Interpreting Figures

As reported by Emery *et al.* (2003) and in the initial AKU evaluations reported below, students rate their tutors very highly. Whilst one may consider this to be a positive, it can lead to problems of interpretation. So, on a 5-point scale where 1 is low and 5 is high, Emery *et al.* cite the case of a lecturer who scored 4.72 for knowledge of the subject on average by her students against an institutional average of 4.77. Whilst one might regard this as highly respectable, in fact, this lecturer had knowledge of subject noted as an area of under-performance on her annual review.

There are a number of issues related to interpreting small amounts of data, with the possibility that student pre-briefing regarding the evaluation exercise can contribute to a difference in student evaluations. So, if students

are giving a lecturer a score of 4.72 out of a maximum total of 5 for subject knowledge, this would be considered high in any analysis, and despite it is marginally below the average for the institution would seem to be irrelevant and it is well within the margin for error in collecting small amounts of data. Further, with such high averages, a very small number of students, with unhelpful motivations, can bring a tutor's score down dramatically by giving very low ratings quite apart from perceived quality of teaching.

It would seem reasonable to suppose that any score or average score of 4.0 or above on a 5 point scale is very respectable and that calculating differences and trends in this range makes little sense unless one has access to a large amount of data, which would therefore be on an institutional rather than individual tutor level. If scores fall below that, then there is reason for a member of the management team to talk with relevant colleagues, looking to explore what has been happening, ask questions, and offer support where necessary. In accordance with comments above about standing firm in the face of negative student feedback, any such conversation needs to start from the view that there may not, ultimately, be anything wrong.

In terms of discursive comments, a level of judgement needs to be exercised depending on what the comment is and how many students are saying broadly the same thing. Of critical importance, there needs to be a sense that students are being listened to, even if they are not being given exactly what they ask for.

Summary of Background Considerations

This discussion suggests the following point as good practice for working with SET:

- decide in advance what the purpose of the evaluation is, avoiding the temptation to have too many purposes simultaneously;
- consider what the underlying model of quality teaching practice is to which you are working, and devise questions accordingly;
- having decided the purpose, formulate an appropriate way of introducing the evaluation procedure;
- limit the number of questions asked using Likert scales;
- have the confidence to disagree with student evaluations when there are good reasons for doing so;
- write a summary of the evaluation data and a response to it, and make this available to students;
- where appropriate, act to address student concerns which arise;
- ensure that there are multiple forms of student evaluation data considered; and

- if at all possible, withstand pressure to take the process too seriously without detriment to the intent of the process.

The next section looks at how these principles are being implemented at the Aga Khan University.

The Aga Khan University Experience

As noted in the introduction, the Network of Quality Assurance and Improvement was formed in 2014 within the Aga Khan University as a means of supporting quality assurance procedures across the university, operating as it does in Africa, Asia and Europe. Part of this effort was to agree to a university wide SET format with a view to consistently and realistically capture student voices as part of ensuring high quality programmes across the university.

The development of this tool was underpinned by an understanding of what is important in assessing teacher quality, drawing particularly on Chickering and Gamson (1987), Gravestock and Gregor-Greenleaf (2008), and university policies on student-centred learning such as the AKU Teaching and Learning Framework (Policy 030, AKU website), looking to ensure that graduates leave with the skills to be problem solvers, critical innovative thinkers, lifelong learners, good communicators and ethically responsible citizens and leaders. In developing the tool, the intention was that this approach should constitute one of several sources of information to assess quality of teaching, with others including ongoing dialogue with faculty members and assignment results.

For questions using a Likert scale, it was decided to use a four-point scale plus 'not applicable', allowing for legitimate variation in responses but requiring students to take a stand on each statement.

Whilst the tool is designed for use at the end of the course before summative assessments, faculty members are encouraged to undertake mid-course evaluations with a view to being responsive to students during a semester.

The SET was piloted both online (using Survey Monkey©) and in hard copy in various departments in Pakistan, UK, Uganda and Tanzania in 2014. Twenty-six different courses were evaluated by students in diploma, undergraduate, and master's programmes. Findings were returned to the institutions through heads of programmes, after final course assessments had been returned, in the expectation that they would be used in a formative manner, with no link being made to appraisal or other such mechanisms.

Findings

Four hundred and twenty-nine of seven hundred students (61.3 %) responded to the pilot SET. Entities chose to either use the online version or the hard copy, with response rates being noticeably better for the hard copy (86 %) compared with the online survey (51 %). Students were given the same introduction and form to fill. However, as the hard copy was given to students at the end of a class many chose to respond there and then, whereas the online SET was sent to their email addresses.

As shown in Table 1 below, over 90 per cent of students (both online and hard copy) found the SET form's instructions, rating scale and questions to be clear as well as indicating that it took a reasonable time to fill out. The majority also preferred the pilot SET form over previous versions used. The majority of students (62 %) felt the form should be mandatory, possibly because of the link made on the form itself between student feedback and improvement in teaching quality. However, this element was the only question which had a rating below 75 % agreement and given the voluntary participation (with nearly 40 per cent not responding) one might limit extrapolating meaning given the specific demographics of the completers.

Table 1: Student feedback on the new SET form

Feedback	% In agreement	% Not in agreement
The instructions were clear.	98.6	1.4
The questions were clear.	97.9	2.1
The rating scale was clear.	90.1	9.9
The survey took a reasonable amount of time to fill out.	88.7	11.3
Completing the survey should be mandatory.	62.2	37.8
Preferred this SET to previous one.	80	20
I would not change anything in this survey.	78.5	21.5

Discussion of Results

Response rate is higher for paper than for online evaluations. Although this difference merits further investigation, a possible explanation is that the students undertaking the evaluation in the paper format did so during class time, so were, in effect, a captive audience, while those using the online format may have been doing so in their own time. Whilst it is possible to note which students have and have not filled out an online questionnaire, to collate this information

and use it to send reminders conflicts with the principle of anonymity. The intention is to work with heads of programme across the university to ensure high response rates through all formats.

Overall, the extent to which students were comfortable with the SET approach was very encouraging, giving a strong basis to encourage the use of this data in working with the faculty to ensure the highest quality outcomes.

Conclusion and Recommendations

Following the success of the pilot, the intention is to roll out the SET form to all AKU courses and instructor evaluations at the end of a course and before the final assessment or examination. For ease of analysis of results, the platform has moved from Survey Monkey© to Bristol Online Surveys©. Whilst analysing the data arising can be done automatically when questionnaires are online, consideration is being given to the analysis of forms completed in paper form, particularly noting the need, if at all possible, to separate out the administration and analysis of such forms as a means of ensuring, and being seen to ensure, a system free from any corruption.

As systems become more established, the expectation is that departments within the university will write reports responding to the points made and using the data in a formative manner to support the faculty and the quality of programmes. Where evaluation data uncover particularly high levels of student satisfaction, the intention is to find ways to celebrate that, both for its own sake and again for shoring up high standards of practice. Globally, as SET procedures have matured they have been used for an increasingly large number of purposes, albeit some contradictory. It is the intention of the QAI_net, working within the Aga Khan University, to ensure that the SET procedure described here will be used as part of the pool of information for the maintenance and improvement of teaching and learning, working supportively with the faculty to ensure the highest quality that can be achieved and aligned to a collective understanding of teaching excellence at the university.

Notes

1. This question comes from a student evaluation questionnaire used in initial teacher training courses in the UK.
2. https://www.surveymonkey.com/
3. http://www.survey.bris.ac.uk/

References

Atkins, S., Yan, W., Meragia, E., Mahomed, H., Rosales-Klintz, S., Skinner, D., and Zwarenstein, M., 2016, 'Student experiences of participating in five collaborative blended learning courses in Africa and Asia: a survey', *Global Health Action*, No. 9, pp. 1–10.

Batchelor, J. H., Miao, C., and McDaniel, M. A., 2013, 'Extreme response style: a meta-analysis', presented at the 28th Annual Conference of the Society for Industrial and Organizational Psychology, Houston. Available online at http://www.people.vcu.edu/~mamcdani/Publications/Batchelor,%20Miao%20&%20McDaniel%20%282013,%20April%29%20extreme%20responding.pdf.

Chickering, A. W., and Gamson, Z. F., 1987, 'Seven principles for good practice in undergraduate education', *American Association of Higher Education Bulletin*, Vol. 39, No. 7, pp. 3–7.

Emery, C. R., Kramer, T. R., and Tian, R. G., 2003, 'Return to academic standards: a critique of student evaluations of teaching effectiveness'. *Quality Assurance in Education*, Vol. 11, No. 1, pp. 37–46.

Gibbs, G., 2010, *Dimensions of quality*, York: Higher Education Academy.

Gravestock, P., and Gregor-Greenleaf, E., 2008, *Student Course Evaluations: Research, Models and Trends*, Toronto: Higher Education Quality Council of Ontario.

IUCEA, 2010, *A Road Map to Quality: Handbook for Quality Assurance in Higher Education*, Arusha: IUCEA.

Morley, D., 2014, 'Assessing the reliability of student evaluations of teaching: choosing the right coefficient', *Assessment & Evaluation in Higher Education*, Vol. 39, No.2, pp. 127–139.

Pickford, R., 2013, 'Leadership of the National Student Survey for enhancement', *Quality Assurance in Education*, Vol. 21, No. 4, pp. 344–358.

QAA, 2012, *Student Experience Research 2012 Part 1: Teaching and Learning*, London: National Union of Students.

QS Quacquarelli Symonds Limited, 2011, 'QS Stars: Methodology Top Universities'. Available online at http://www.topuniversities.com/qs-stars/qs-stars-methodology.

Shevlin, M., Banyard, P., Davies, M., and Griffiths, M., 2000,'The validity of student evaluation of teaching in higher education: love me, love my lectures?', *Assessment & Evaluation in Higher Education*, Vol. 25, No. 4, pp. 397–405. Available online at https://doi.org/10.1080/713611436.

Sumaedi, S., Bakti, G. M. Y., and Metasari, N., 2012, 'An empirical study of state university students' perceived service quality', *Quality Assurance in Education*, Vol. 20, No. 2, pp. 164–183.

Technical University of Kenya, 2015, 'Student evaluation on course units and lecturers. Available online at http://tukenya.ac.ke/student-evaluation-course-units-and-lecturers.

Tennant, G. D., 2001, 'The Model United Nations General Assembly Project', *Teaching Citizenship*, No. 1,pp. 34–37.

von Glaserfeld, E., ed., 1991, *Radical Constructivism in Mathematics Education*, Dordrecht: Kluwer Academic Publishers.

Appendix: Pilot SET Form

AGA KHAN UNIVERSITY		DID YOU KNOW?
Student Evaluation of Teaching (SET)		Your input is voluntary and anonymous
Course Instructor	Current Year	Your feedback enhances teaching quality
Course Title	Year Group/Class of	Course reviews will take into account your opinions
Department/Program	Semester	Your input helps strengthen the learning experience

INSTRUCTOR EVALUATION: For each statement tick the box you most agree with. "Instructor" refers to your faculty member/teacher/facilitator.

	Sometimes	Frequently	Always	Not applicable
Principle 1: Encourages Contact between Students and Faculty				
1. My instructor was available and accessible when I needed either through office visits or by email or other means.				
Principle 2: Develops Reciprocity and Cooperation among Students				
2. My instructor provided opportunities for me to collaborate with other students.				
Principle 3: Encourages Active Learning				
3. My instructor encouraged participation and provided opportunity for group work and discussion.				
Principle 4: Gives Prompt Feedback				
4. My instructor's feedback on course assignments, projects, clinical work, papers and/or tests provided timely guidance on how to improve my performance.				

Principle 5: Emphasizes Time on Task							
5. My instructor provided a detailed course outline at the beginning of the course and organized course concepts and content in a logical manner.							
Principle 6: Communicates High Expectations							
6. My instructor shared grading expectations (rubrics) for all assignments with us.							
Principle 7: Respect Diverse Talents and Ways of Learning							
7. My instructor used a variety of learning activities (e.g., discussions, small group projects, labs, the web, educational technology) that engaged me and met my own learning needs.							
Indicator of Overall Satisfaction with Instructor							
8. Overall, I would recommend this instructor as an effective university teacher.							
Please provide supplementary comments for the instructor on the overall quality of the instruction in this course. Your comments are anonymous and will not be given to the instructor until final grades have been submitted to the Registrar. Please be sure your comments about the instructor are fair, constructive, useful and relevant.							

COURSE EVALUATION: For each statement tick the box you most agree with.	Not at All	Somewhat Agree	Mostly Agree	Agree Completely	Not Applicable
9. The course provided me with a deeper understanding of the concepts and subject matter.					
10. The course projects, assignments, tests, and/or exams provided opportunity for me to demonstrate an understanding of the course material.					
11. The course learning outcomes were met.					
12. The course field experience and/or clinical component improved my understanding of the course material.					
13. The course provided opportunity to draw from scholarly research.					
14. Adequate support (e.g. educational technology and library resources) was available and accessible to enhance my learning.					
15. Course concepts were clearly presented.					
16. The course provided opportunity for me to critically reflect on practice or on important issues in the subject matter.					
17. Course projects and/or assignments provided opportunity for creativity and innovative thinking.					
18. I found the course intellectually stimulating and motivating.					
19. Please tick which, if any, of the following competencies this course met:	Problem Solving Critical Thinking Life-long Learning Leadership Ethical Reasoning Effective Communication Other (please state on line below)				
	Other:				
20. If I were to change something about this course it would be…					
Please provide supplementary comments for the course. Your comments are anonymous and will not be given to the instructor until final grades have been submitted to the Registrar. Please be sure your comments about the course are fair, constructive, useful and relevant.					

Reflections on an Innovative Mentoring Partnership Facilitators and Inhibitors to Success in Faculty Development

Tashmin Khamis* & Marilyn Chapman**

Abstract

The need for more interactive, learner-centred pedagogies at Aga Khan University in East Africa led to the development of a partnership with Academics without Borders (AWB). AWB recruited three nursing faculty volunteers to provide mentorship to the nursing faculty at the three Aga Khan University Advanced Nursing Studies campuses in East Africa. As part of the evaluation and as a strategy to improve the quality of the mentoring and the project, the authors developed an action research study to identify facilitators and inhibitors to the success of this inter-cultural initiative. In this article, the authors share their observations and reflections as recorded in journal entries and postings to an online site as well as the results of a strengths, weaknesses, opportunities and threats (SWOT) analysis completed by mentees, mentors and project coordinators. Finally, the authors share their thoughts on the implications for future cross-cultural mentoring relationships at Aga Khan University and the potential for assisting others in similar relationships.

Keywords: inter-cultural mentorship, action research, learner-centred pedagogy, academic partnerships, teaching and learning

Résumé

Le besoin de plus de pédagogies interactive, axées sur l'apprenant à l'Université Aga Khan en Afrique de l'Est a conduit au développement d'un partenariat avec Academics Without Borders (AWB). AWB a recruté trois volontaires de la faculté des sciences infirmières pour assurer un mentorat à ladite faculté

*   Aga Khan University, Nairobi, Kenya; Email: tashmin.khamis@aku.edu
**   Academics without Borders volunteer, Vancouver Island University, retired.

au niveau des trois campus des Etudes supérieures en sciences infirmières de l'Université Aga Khan en Afrique de l'Est. Dans le cadre de ladite évaluation et comme stratégie visant à améliorer la qualité du mentorat et du projet, les auteurs ont développé une étude sur la recherche action pour identifier les facilitateurs et les inhibiteurs de succès de cette initiative interculturelle. Dans ce présent article, les auteurs partagent leurs observations et les réflexions telles qu'elles sont enregistrées dans les articles et les annonces à un site en ligne ainsi que les résultats d'une analyse des forces, faiblesses, opportunités et menaces (SWOT) menée par les poulains, les mentors et les coordinateurs de projet. En fin, les auteurs partagent leurs points de vue sur les implications des futures relations de mentorat interculturel à l'Université Aga Khan et offrent la possibilité d'assister les autres dans des relations similaires.

Mots clés : mentorat interculturel, recherche action, pédagogie centrée sur l'apprenant, partenariats académiques, enseignement et apprentissage.

Introduction

The authors of this paper were involved in an innovative inter-cultural mentoring project. One of the authors was the project coordinator for Aga Khan University (AKU) in East Africa. The other two authors were mentors recruited by Academics Without Borders (AWB). The goal of the project was to provide mentorship to nursing faculty members in order to expand their pedagogical approaches to include more interactive strategies and to increase the level of scholarship within the Advanced Nursing School – East Africa (ANS–EA). The paper outlines an action research project developed by the authors to provide for ongoing improvement of the mentoring while the project was in progress and recommendations for future mentoring opportunities.

Background

Aga Khan University (AKU) is truly international, spread across eight countries in Asia, Africa, the Middle East, and the UK. It began with a school of nursing in Pakistan over thirty years ago. Excellence in teaching and learning is one of its strategic priorities within its core principles of quality, access, relevance and impact, as it aims to develop leaders and critical thinkers to serve the developing world.

The Advanced Nursing School (ANS–EA) operates in Kenya, Tanzania and Uganda where there is a lack of nurses to meet the health needs of the region. ANS–EA has been upgrading working nurses (n=2000) to the Diploma and the Bachelor of Science in Nursing level for the last ten years.

AKU's quality assurance framework focuses on the student journey. Recent internal quality assurance reviews of ANS-EA identified faculty development as a priority for improving the student experience through enhanced pedagogy, feedback, assessment of learning, and closer student-to-faculty contact.

Since 2006, the mission of Academics Without Borders (AWB) has been to build capacity in developing countries by strengthening higher education based on needs identified by the local higher education institutions. The project described in this article was a joint venture between AKU ANS–EA and AWB. The initiative focused on a mentoring programme to strengthen the capacity of AKU ANS–EA's nursing faculty for both the EN-RN and RN-BScN programs at its sites in Kenya, Tanzania and Uganda.

AWB has a network of contacts in universities across North America and it recruited interested academics with the skills required by ANS–EA. AWB completed a vetting process of applicants, but the final decision on which mentors were chosen was made by ANS–EA. Three volunteers were selected: one to work in Uganda, one in Tanzania and one in Kenya. The needs addressed by each volunteer varied slightly on each campus, so each was selected for their slightly different skill set.

The formal objectives of the partnership between AKU ANS–EA and AWB were:

- to implement a faculty development continuing education plan that met identified needs from the quality assurance reviews of the three campuses of ANS–EA;
- to build the capacity of the nursing faculty on student-centred pedagogies, clinical teaching, effective feedback and assessment of student engagement and learning;
- to share lessons learnt and mentoring strategies for faculty development across Aga Khan University and with other higher education institutions in East Africa.

The Action Research Study

Right from the onset of the project between ANS–EA and AWB it was realised that there was a need to adopt an 'elastic practice' approach to the mentoring innovation (Carew, Lefoe, Bell and Armour 2008) in order to remain open to changes in the academic development process as required and that there would be lessons to be learnt from this partnership. The initiative was therefore designed as an action research project, so that through the cycles of implementation of the mentoring, key lessons could be acted upon to improve provision through incorporation of these in subsequent cycles.

The key questions for the research were:

1. What are the challenges to implementing a cross-cultural mentoring process and how did mentors address these during the life of the project?

2. What are the facilitating factors that contribute to the success of a partnership between an East African University and the non-profit organisation. Academics without Borders?

3. What can be learnt from this experience of partnering for mentoring that would inform future endeavours both at AKU but also for other academic and education developers?

Literature Review

Action Research

Action research is a qualitative research method through which individuals or groups engage in systematic inquiry into an area of their practice (such as teaching) with the intent of transforming practice for the better (Mezirow *et al.* 2000; Waterman, Weber, Pracht, Conway, Kunz, Evans, Hoffman, Smentkowski and Starrett 2010).

In action research there are a series of phases, which can be completed once or be repeated through a number of cycles. Heron and Reason (2001) describe the steps or phases of the process as follows:

• Phase 1: People/practitioners come together to explore a common area of interest and agree upon a focus and a method for inquiry.

• Phase 2: The group members become co-researchers and carry out the inquiry, observing and recording their actions and experiences.

• Phase 3: The group members become fully immersed in the inquiry process, becoming more open with each other, which tends to allow for more honest discussion of pre-conceptions or assumptions.

• Phase 4: The group shares their experiences and considers their initial framing of issues, reframing them as necessary.

The authors used the phases described to inform the design of this study. They recorded their observations and reflections in personal journals and accessed postings from an online discussion forum, which was used to facilitate communication between the mentors and ANS–EA leaders during the project. The evaluation data on the project also informed open discussion between the researchers.

Cross-cultural Partnerships for Mentoring

Mentoring has been described as 'a reciprocal and collaborative learning relationship that develops between two individuals with mutual goals and shared accountability for the success of the relationship' (Hnatiuk 2012:9.). Wroten and Waite (2009) note that mentorship involves purposeful activities that assist in career development and personal growth. A mentoring relationship can develop at any point in a professional's career and often is needed when moving from one role to another or when new skills or knowledge are required (Hnatiuk 2012; Metcalfe 2010; Wroten and Waite 2009).

Keiter Humbert, Burket, Deveney and Kennedy (2011) researched the experiences of occupational therapists engaged in international, cross-cultural work experiences. Their findings highlight the complexity inherent in such experiences, which are 'dynamic, multi-faceted and intricate' (Keiter Humbert *et al.* 2011:306). Participants in the study emphasised the need for cultural awareness by distinguishing the difference between one's own culture and that in the work context. Purnell (2005) also identifies that working cross-culturally requires a degree of cultural awareness and cultural sensitivity. The process of developing such awareness tended to be accompanied by internal conflict, particularly surrounding a sense of how little the practitioner knew about the culture, both in the workplace and social environment.

These and numerous other factors make cross-cultural mentoring challenging, as time is a strong factor in developing the cultural awareness required (Purnell 2005). In this project, we could say that nursing mentors faced similar kinds of challenges and the time available to mentors to develop such cultural awareness was limited.

Academic work is subject to cultural differences. Allan (2010) states that different teaching approaches and learning styles can be challenging in situations of cross-cultural teaching and mentoring. Often in mentoring situations the mode of learning is based on adult learning principles, and reflection on practice is expected. Individuals educated outside the Western education system may be more comfortable with other approaches. Differing expectations can interfere with effective mentoring. Mentoring programmes should consider learning style diversity as well as development of cultural awareness and cultural competence (Allan 2010).

The nursing faculty mentors involved in this project tried to be sensitive to the varied cultural differences and learning styles while, at the same time, they strived to create nurturing environments for their faculty mentees. At times this was challenging and led to reflections on how mentors might work effectively with the ANS–EA faculty and share responsibility for the success of the project.

Methodology and Analysis

Action research was employed to reflect on practice and address issues that arose over a four-month period. This qualitative approach was the most appropriate methodology to use, allowing for the research to be interpretive and action orientated in nature (Ellis and Bochner 1996).Early in the project the three mentors and project coordinator decided it would be worthwhile meeting regularly and sharing their perceptions of the mentoring process, evaluating the effectiveness of the approaches that were being used and making adjustments as needed. In other words, the steps of the action research process, as outlined by Heron and Reason (2001) were utilised. In order to access data from a variety of sources, the mentors and director of quality assurance kept reflective journals, contributed to an online discussion forum and discussed their experiences at regular review meetings. To augment the data collected through these actions a SWOT (strengths, weaknesses, opportunities and threats) analysis was completed at the mid-point in the project.

The mentors were three nursing faculty members from two universities in Canada and one from the United States of America. Each came with experience of action research and extensive teaching experience as well as being well grounded in community development theory and action. One of the mentors had previous experience of working in East Africa. The article is authored by two of the mentors and the director of quality assurance at AKU who also had experience with action research and teaching experience.

1. Reflective journals: Each mentor and the project coordinators (academic heads from each ANS–EA campus and the director of quality assurance, who was the primary coordinator of the project) kept a reflective journal in which they wrote, on average, once a week to reflect on how the implementation was progressing and identifying challenges to and successes of faculty development. Each mentor was working with five to eight faculty members. The reflections were brought to the review meetings (see below) for discussion. Later, the journals were analysed for themes in order to address the research questions

2. Online discussion forums: The three mentors and four project coordinators participated in online discussions, reflecting on barriers or facilitators to the mentoring programme. These were documented on MOODLE (an e-learning platform) and provided a useful source of data to review when identifying themes in the journals, as they provided ongoing documentation during the implementation processes.

3. Review meetings: These were held every two weeks to review progress, share lessons learned across the three countries and identify next steps. The three mentors and project coordinators participated. The meeting

notes were documented, uploaded to the MOODLE site and aided in the reflective process as well as providing a record of decisions and suggestions that were made. Throughout these discussions mentors were supported to make adjustments to their mentoring approach by faculty members. Any adjustments to the approaches used could then be discussed at later review meetings and became part of an ongoing cycle of action, reflection and adjustment.

4. SWOT analysis: A midterm participatory review, which included strengths, weaknesses, opportunities and threats (SWOT) analysis, was conducted with mentors (three), mentees (20) and the project coordinators (four). This process identified the strengths, challenges, facilitating factors and inhibiting factors as perceived by each group of participants in the project and, when used to complement the journal reflections allowed for further adaptations to the mentoring process in the final two months of the project.

As noted a process of reflection upon actions taken was used to make adjustments to the mentoring process as the project progressed. However a final analysis of data was accomplished towards the end of the project in order to make recommendations on the lessons learned throughout the project. A mixed method approach was used to triangulate data. Triangulation is used to investigate a phenomenon from different perspectives adding to the robustness of conclusions drawn through qualitative means. This may be done by triangulation of data, investigator triangulation, triangulation of theories and methodological triangulation (Rogers, Sharp and Preece 2011) as employed in this study.

Each mentor/manager identified themes from their own journal. The online discussions and meeting notes, as well as the SWOT analysis were analysed for themes by the authors of this article. Themes were identified and compared with those arising from the journals. From this analysis the facilitating and inhibiting factors to the success of the mentoring programme were derived. In order to reduce repetition, the themes found in the online forum postings and the review team meeting notes have not been described separately in this paper as they mirror the ideas and tensions noted elsewhere. The language style of the authors is preserved in the reporting of their journal themes below.

AKU representative – My Journal: Reflecting on Reflections

It appears, in terms of managing the AWB mentoring initiative, that there were facilitating and inhibiting factors to the process. The themes identified were:

1. Management support
2. Ownership
3. Creating and enabling environment, including team work
4. Hand holding and role modelling.

Where an academic head did not take charge of the initiative, uptake was slower or less successful. The role of the academic leader both to support the mentor and also to encourage the mentee relationship was crucial. This juxtaposed to the perception by the mentee of the mentoring being a management-driven top-down initiative. However, once a mutual common understanding was established of the goals and purpose, mentees were keen for the mentoring to continue. The lesson learned was: do not assume that by informing management or the academic head of the goals and objectives; faculty members are well versed with these intents. The need for orientation to create buy-in and, hence, ownership is critical for success.

An enabling environment is crucial. On campuses where team work was not the working culture, there appeared to be more resistance and cynicism concerning faculty development and less openness to a peer visiting class, creating/sharing teaching plans and co-teaching. In such instances, the mentor's role modelling is crucial to break down barriers and promote best practice through example setting, including reflecting by the mentor on how teaching can be improved. The need to operate in a safe academic environment enables relationship building, critique and reflection.

Who drives the outcomes? There was a tension felt between the set goals for the initiative (faculty development on pedagogy as identified in a quality assurance review) and the outcomes mentees wanted (i..e., publication). Thus, it is important to insure faculty members are involved from the start of the project so open communication about outcomes can occur. ANS–EA leaders thought this had occurred but faculty members did not perceive this to have happened. Re-explaining the initiation and purpose of the project was required. Also matching the expertise of the mentor to the need of the mentee is important as is ensuring flexibility is built in to take advantage of both.

Before the mentoring initiative, several faculty development workshops had been conducted at ANS. Despite using micro teaching (organised practice teaching) during these sessions, follow-up observations showed little change in pedagogical practices. However, through the mentoring initiative, it was evident that the most powerful levers of change were when mentors actually role modelled a good teaching session and, even more, when they worked directly with the faculty to plan and co-teach a lesson,

i.e., handholding (see SWOT results). In so doing, faculty members were empowered as they developed their confidence in trying a new teaching method in the safety of a peer – their expert mentor. In the SWOT analysis mentees also confirmed that changes in their pedagogical practice were due to 'learning by doing' in a 'non-threatening' environment.

AWB Mentor #1 – Reflections: Themes from Journal Entries

In analysing the reflective journal this mentor kept throughout the project the following themes were identified:

1. Relationship building
2. Competing responsibilities
3. Transformation takes time
4. Challenging the status quo is… challenging.

Relationship Building

It took much longer than anticipated to develop an effective working relationship with faculty members. In the early writings the mentor reflects on how her gender, 'whiteness' and Canadian 'way of knowing and being' might influence how faculty members at ANS–EA would view her and how it might impact relationship development. She feared presenting herself as superior or all-knowing.

In a variety of journal entries, this mentor noted the difficulty in trying to arrange times to attend classes or meet with faculty members. Initially, she wrote that she did not fully understand the tensions/dynamics within the faculty group. It was revealed during the mid-point evaluation of the project that faculty members believed the project with AWB to be a 'top-down' initiative and hence, initially, there was a resistance to working with the mentors. It was difficult to know how hard to push the faculty members to meet and work with her. She had a sense that if she demanded too much of them they would demonstrate more hesitancy and even total resistance.

After reflecting upon the hesitancy of faculty members to meet and after discussing the matter at review meetings the mentor tried a different approach with faculty members. She spent more time in informal conversations and dialogue with faculty members over coffee or lunch. The conversations helped her develop a better understanding of some of the social structures in Kenya as well as the general education system, nursing education and government oversight of education. Such evolving understandings helped her to take a new look at some of the dynamics on the team and ways in which

nursing education and nursing in Kenya were governed by certain agencies and processes. Her perception was that even pedagogical approaches were seen by faculty members to be influenced and even dictated by the rules set out by external agencies. There was so much content outlined for inclusion in nursing education programmes that the faculty thought that only by lecturing could they insure that all of it was covered. The mentor was able to begin some philosophical discussions with some faculty members regarding pedagogical approaches and adult education principles.

Journal entries reveal that, after about two-and-a-half months, faculty members appeared more comfortable with the mentor and worked on alternate teaching strategies and the action research project developed momentum. Gradually, as the mentor attended classes and clinical placements with faculty members, she felt that they came to know her better and spoke more openly about their practice. Several faculty members came to her, asking for assistance with their teaching and writing. As trust developed, team teaching was a strategy that seemed more acceptable and contributed to relationship building. The faculty members and the mentor engaged in more dialogue, providing feedback to each other and planning for the next class.

Some faculty members were very hungry for this academic dialogue with the mentor and others were not so anxious for this opportunity. Focusing their joint efforts on an action research project concerning which classroom strategies engaged students the most, moved the focus from individual teachers to the faculty as a whole and the mentor wrote that she believed that this also contributed to the development of better individual relationships and allowed for academic dialogue based on a model of shared power. The mentor noted that reflection on practice, which is essential for transformative learning, did not seem to be a process that came easily to faculty members. As a mentor it took her a long time to realise that this was not a learning style/practice that was familiar or at least reflections on practice were not shared easily with others.

Competing Responsibilities

Throughout the four months that the mentor was in Nairobi, there was rarely a full complement of faculty members present. Faculty members were away at conferences, committee meetings, courses on another campus, on vacation or sick leave and teaching on other campuses. Although these are/ were bona fide activities for faculty members it did make it challenging to meet regularly with individuals or the team as a whole. In addition, faculty members reported having a heavy load of responsibilities, including teaching theory and clinical practice, organising clinical experiences and

evaluations, preparing examinations, auditing each other's examinations, marking, etc. Several times a meeting with the mentor was cancelled by faculty members, as either a more pressing meeting was arranged or not enough people attended.

The mentor, also, had a sense of competing responsibilities. The project had designated outcomes and she wrote about her responsibility to meet those outcomes. However, her philosophical orientation was noted as one of community development, transformative learning and shared responsibility. She wrote often that there was a tension between this personal philosophy and wanting to honour the aims and objectives of the project. Philosophically there was a belief that the project could only go as fast as the participants would allow.

Transformation Takes Time

Inherent in the design of this project was a belief that changes needed to happen in how teaching and learning occurred at AKU. There was an identified need for more student- and/or learner-focused pedagogies as opposed to teacher-focused strategies that tended to emphasise content rather than the development of critical thinking and application of theory to practice. Such a change in focus required a philosophical shift. The mentor wrote that she often became discouraged, and on several occasions, had to remind herself that transformative learning does not happen on a set schedule; in fact, it takes time and often happens much later, once a project is apparently finished.

Challenging the Status Quo is... Challenging

Several entries in the journal point to the difficulty of trying to refocus teaching and learning strategies in a curriculum that is set by an organisation outside of the university. The curriculum is very content heavy, as set by the Kenyan Nursing Council, which leads to some of the tensions experienced by faculty members: do they try innovative strategies aimed at developing critical thinkers and developing lifelong learners or do they simply cover as much content as they can in every class and pray students remember some of it? The mentor gradually became more understanding of the tensions faculty members experienced.

The mentor perceived tensions within the faculty group around competing and divergent beliefs about pedagogy and political action. Late in the project, it became apparent to this mentor that faculty members might need support in order to take leadership action and begin to influence

change. She noted in the journal that the need to develop leadership and more effective teamwork among the faculty members was pivotal in order to move forward. Teamwork began to evolve while faculty members worked on the project about engaging classroom strategies and entered into more philosophical conversations regarding pedagogical approaches.

AWB mentor #2 – Reflections

As the mentor in Uganda had to leave after two months, her journal has been reviewed and a thematic analysis completed by the other researchers. She reviewed and agreed with the analysis that follows. The themes identified were:

1. Conflicting agendas
2. Various degrees of engagement
3. Need for teamwork

Conflicting Agendas

It was evident from the beginning that faculty members often had different priorities for their work with the mentor than was intended in the original project design. The academic head, who was actively involved in developing the project design, identified a need for the mentor to work on pedagogical approaches with the faculty. However, when meeting with the mentor, faculty members often asserted that they would like assistance in writing articles and grant proposals and it getting ideas for student-centred learning. Faculty members certainly seemed more engaged when working on activities they saw as important. Some faculty members met regularly with the mentor and others did not.

Progress was made in some areas, for example, in student-centred learning. In order to engage students in psychiatric-mental health nursing (who were much more interested in doing physical assessments), the mentor suggested that students focus on how to listen to persons with mental illness (stigmatising conditions in this culture). Patients were identified who would tell the students their stories: effects of their illness on families and themselves; their comments on the health professional caring for them. Students were also able to articulate their concerns in caring for people with mental illnesses. This strategy was a great success and the faculty member vowed to continue it.

This contribution was derived in memoriam from Dr. Judith Baigis.

Various Degrees of Engagement

In the journal it was evident that faculty members engaged with the mentor to varying degrees. Some were very enthusiastic and approached the mentor; others needed to be invited by the mentor in order to engage. Some faculty members invited the mentor to class and clinical experiences, but others seemed hesitant to do so. Some eagerly discussed feedback on their teaching and writing, while others were not as enthusiastic. The mentor notes that arranged meetings sometimes did not occur. Faculty members' workload and faculty members' leaving for courses and other activities off campus complicated the work and relationship building. Thus, the mentor spent most of her time with those faculty members who wanted her support and expertise, while continuing to encourage the others to become engaged.

Need for Teamwork

Faculty members were often observed using innovative teaching strategies. However, they were often conflicted on how much content they needed to cover and were hesitant to move responsibility to students for covering materials. The mentor obliquely mentions that faculty members needed to work as a team so that certain approaches, such as having students read and prepare ahead for classes, could be enforced. She suggested that this approach would allow for more innovative classroom strategies focused on application of material. Some faculty members were doing this, but others needed support and encouragement to accomplish such actions. The mentor suggests that a stronger team approach and leadership development might assist each faculty member to seek collegial assistance and benefit from the innovative approaches being utilised.

Overall SWOT Analysis of AWB Mentoring Programme Across East Africa

The SWOT analysis was conducted at a workshop held in Nairobi two months into the project. Representatives from the three campuses were present. Faculty members, administrators and academic heads as well as the mentors completed the SWOT analysis separately, and then the results were combined to create an overall analysis.

Table 1: Overall SWOT analysis

Strengths	Facilitating Factors
• Role modelling by mentor (attitude and behaviour of mentor) • Action research • Handholding (attending class; planning lessons; immediate feedback) • Sharing of experiences • Research expertise • Innovative teaching methods learnt • Learning by doing • Mentors' expertise and commitment	• The thorough vetting process to identify mentors • Well-defined need to match the mentors expertise with faculty needs • Non-threatening • Confidential • Presence on campus • Institutional facilitation of initiative • Faculty involvement and ownership • Academic head involvement
Challenges	Inhibiting Factors
• Lack of availability of faculty members • Lack of time (2 months' mentoring too short) • Initially seen as top down • Slow pace of change; not meeting all outcomes • Mentor and management driven rather than faculty driven • Time required by mentors to understand culture and context	• Competing priorities • Based on institutionally identified needs rather than individual faculty needs (lack of ownership) • Lack of understanding/communication of the initiative • Lack of a team culture in some campuses

As shown in Table 1, most of the facilitating and inhibiting factors, as well as strengths and challenges, identified mirror issues and tensions raised by the authors and the other mentor in their reflections and journals themes.

Discussion

In many ways the challenges to implementing a cross-cultural mentoring process created learning opportunities and eventually illuminated the facilitating factors or key issues to consider for success. For this reason, the challenges and facilitating factors will be discussed together and will lead to an exploration of how these insights might inform further projects. The challenges were often revealed during the action research process and attempts were made to address them as the project progressed.

What are the Challenges and Facilitating Factors to Implementing a Cross-cultural Mentoring Process?

Mutually agreed-upon goals are important to the success of a mentoring project (Hnatuik 2009).The perception of faculty members at ANS–EA that the mentoring project was mandated by the administration clearly influenced relationship development between faculty members and mentors. Despite actions on the part of ANS–EA administrators to engage the faculty in the design of the project, there seemed to be a resistance, initially, to working with the mentors. Partly, this seemed related to differing agendas with faculty members often wanting to have assistance in writing and scholarship, while the project outcomes identified enhancing student-focused pedagogies. The mentors struggled with the resulting philosophical tension this created, as each came with a community-development orientation (Freire1992; Naidoo and Wills 2009). As a result of reflection on action, in one instance the two agendas were combined when a faculty team investigated learning strategies that engaged students.

Mentoring is a complex process and both an art and a science (Metcalfe 2010). It is even more complex when occurring cross-culturally. Expectations surrounding the role of the mentor/teacher vary between cultures (Wroten and Waite 2009). The AWB mentors experienced challenges in trying to understand the dynamics of the faculty teams and developing an understanding of how best to mentor in this context. Their writings suggest that it took time to develop relationships and try different approaches. Wroten and Waite (2009) suggest that gender, race/ethnicity and culture are factors that influence the nature of the mentoring relationship and are noted in some of the reflections and journal entries in this study. The mentors' non-threatening approach and their presence on campus over time were identified in the SWOT analysis as facilitating the mentoring process. The art of mentoring is illustrated in this delicate dance between pushing faculty members while not pushing so hard that relationships are destroyed.

The three mentors were committed to the project and the development of their relationships with faculty members. Each of the mentors came with a different skill set, had a different personality and was self-reflective about her practice. Their journals showed that they were willing to try different approaches based upon their reflection on how the project was progressing. Role modelling effective teaching approaches through team teaching and other teaching demonstrations, developing class plans with faculty and, providing constructive feedback were all effective mentoring strategies. These strategies are consistent with the roles for mentors identified by Tobin (2004), which include advisor, role model, coach, and confidante. Darling (1984) identifies

numerous traits demonstrated by mentors including inspirer, supporter, envisioner, teacher-coach, feedback-giver, eye-opener, door-opener, idea-bouncer, problem-solver, career-counsellor and challenger. The AWB mentors assumed many of these roles with faculty members. However, these roles are dependent upon the development of effective relationships, as noted by Allan (2010). Relationship development and mentoring effectiveness were related to the need to better understand the culture of the organisation as well as the societal culture (Allan 2010).One mentor commented on how meeting more informally with faculty members assisted her to better understand organisational culture so that she could better assume the various roles of a mentor.

At the end of the second month of the project, a workshop was organised for faculty members from each of the three ANS–EA campuses. It was important to both the AWB mentors and ANS–EA administrators that the focus of the workshop be on faculty members sharing their experiences. The commitment to this orientation for the workshop also contributed to relationship development as faculty members realised they were introducing more learner-focused strategies in their teaching: change was happening. The workshop also provided an opportunity for academic dialogue between the mentors and faculty members on a variety of pedagogical issues. Wroten and Waite (2009) note that mentoring can have a great impact on a person particularly when mutual interest, respect and trust are present. Creating a positive learning environment to address anxiety issues, and also understanding different learning styles was important to the process (Pritchard and Gidman 2010) and was a key contributing factor to the success of the workshop.

Allan (2010) notes that nurses educated in different countries may have differing expectations about how nurses learn, including expected learning styles and the degree of adult learning philosophy employed. Such differences can greatly influence the mentoring process. Reflection on practice is a mode of learning emphasised in the Western education system but may not be so in other areas of the world. Interactions with faculty members and the responses to some of the exercises at the workshop demonstrated the differences in learning styles that may be culturally influenced.

As noted above and identified by Metcalfe (2010), organisational culture also had an impact upon the mentoring process. Faculty members demonstrated varying degrees of engagement in the project. Where academic heads were able to provide leadership on the project there was more faculty involvement. It became evident to the mentors that faculty members needed to assume more leadership and ownership for their learning as well as demonstrate more teamwork in order to support each other more effectively. Such actions would

contribute to the development of more efficient ways of preparing classes and developing alternate teaching approaches, as well as accomplishing other academic responsibilities such as research and ongoing curriculum evaluation and revision. Metcalfe (2010) says that nursing, as a profession, needs its current leaders to role model and cultivate new leaders for tomorrow, underscoring the roles for mentors, administrators and faculty members.

What can be Learnt from this Experience of Partnering for Mentoring that Would Inform Future Endeavours?

The need to provide adequate time for relationship building between the mentors and faculty members is very important. It took time for the mentors to become more attuned to the nuances of the faculty teams in order to work effectively. The project design originally called for mentors to be in place for six months. However, due to the challenges in finding mentors who could commit for six months, a shorter period was selected (two to four months). Each of the mentors found that, after two to two-and-a-half months, they were developing more effective relationships with faculty members.

Careful attention needs to be given to the length of time mentors are engaged in a project. The time needs to be aligned with the outcomes envisioned for a project. Wroten and Waite (2009) assert that certain mentees may need several mentors depending upon their needs at any one time. In this project, mentors were assigned to a specific campus but, instead, the three mentors might have moved between sites in order to share their specific expertise.

Towards the end of the time that mentors were in East Africa, it became apparent that there were underlying issues or needs that had not been identified previously through the action research cycles. These might benefit from further mentoring attention. Both authors of this article (and the second AWB mentor whose experiences are recorded here) noted a need for the faculty to develop its leadership capacity and ability to engage in effective teamwork. It was challenging to get faculty members to work together on projects, partly because of competing responsibilities but also because of hesitancy to assume shared leadership roles and work as a team. There was also a hesitancy to address the political issues that held faculty members back from moving towards more learner-centred pedagogies. Such growth is important if faculty members are to work effectively with student-centred pedagogies and may require further mentoring and support. Faculty members need care and nurturing from their administration and mentors in order to develop in their practice and leadership (Wroten and Waite 2009).The activities described in this article were just the beginning of such a transformative project.

The outcomes envisioned for the project and the issues identified in the previous paragraph require transformative learning on the part of ANS–EA faculty members, mentees, mentors and administrators. Transformative learning takes time and is difficult to schedule (Mezirow 2000). According to Mezirow (2000:5), learning is understood as 'the process of using prior interpretations to construe a new or revised interpretation of the meaning of one's experience as a guide for future action'. He also notes that language and social practices are cultural and influence learning and knowing; historical power structures and processes can limit the ability of people to reflect and challenge assumptions concerning such practices. Power is a component of all relationships and so is a key consideration in teacher/learner relationships and, one would assume by extension, mentoring relationships. When learning to be more effective practitioners, teachers (in this case nursing faculty members) need to reflect on the assumptions that drive their practice, an often challenging and confusing task (Brookfield 1995).As suggested by Lee *et al.* (2013), there is a need for such international collaborations to proceed with humility and with understanding of post-colonial tensions in order to better appreciate the strengths of the cultural exchange.

Conclusion

Although the partnership between Aga Khan University and Academics Without Borders was mutually negotiated and the information disseminated and discussed with all stakeholders, the complexity of a cross-cultural mentoring project between mentors from North America and faculty members at AKU ANS–EA was not fully appreciated. There were several facilitators and inhibitors to the success of this project. The themes identified from the journals of three people in this study indicate that sufficient time, patience, cultural sensitivity and effective communication are keys to success.

The development of project outcomes by the faculty members at ANS–EA might have contributed to a greater sense of ownership of the project. Such an approach would have assisted the mentors to work from a community development approach. In order for faculty members to move towards student-focused pedagogies, they need to develop a greater sense of their learning needs around pedagogy, taking more time for reflection on practice and assuming more individual leadership roles, contributing to more effective teamwork. Supporting faculty members in the development of their leadership potential and ability to influence change, as well as fostering effective team functioning, is important for the development of a consistent approach to learner-centred pedagogy.

Understanding the dynamics within an institution, the tensions experienced by faculty members, and the constraints of AWB mentors has assisted the University to expand to a much larger virtual mentorship project with AWB. This involves twenty-two faculty mentees from the disciplines of Nursing, Medicine and Teacher Education across Tanzania, Kenya and Pakistan working with eight educational development mentor academics in North America, including the continuation of mentoring by the AWB author. Through this virtual mentoring project AKU faculty members from a variety of disciples are being assisted to develop their teaching and also engage in educational research.

The role of peer mentoring is documented as one of the more effective strategies in the support of teaching excellence of faculty members (Fexias *et al*. 2013; Randall *et al.* 2013). Lessons learnt from the facilitating and inhibiting factors identified in this study on international mentoring partnerships provide some ideas for consideration by others embarking on cross-cultural mentoring for education development of higher education faculties.

References

Allan, H., 2010, 'Mentoring overseas nurses: barriers to effective and non-discriminatory mentoring practices', *Nursing Ethics*, Vol. 17, No. 5, pp. 603–613. https://doi.org/10.1177/0969733010368747

Brookfield, S., 1995, *Becoming a Critically Reflective Teacher*, San Francisco, CA: Jossey-Bass.

Carew, A.L., Lefoe, G., Bell, M., and Armour, L., 2008,'Elastic practice in academic developers, *International Journal for Academic Development*, Vol. 13, No. 1, pp. 51–66. https://doi.org/10.1080/13601440701860250

Darling, L., 1984, 'What do nurses want in a mentor?', *Journal of Nursing Administration*, Vol. 14, No. 10, pp. 42–44. https://doi.org/10.1097/00005110-198410000-00009

Ellis, C. and Bochner, A., 1996, *Composing Ethnography*, Berkley, CA: Altamira Press.

Fexias, M. and Euler, D., 2013, 'Academics as teachers: new approaches to teaching and learning and implications for professional development programmes', *International HETL Review*, Vol. 2, No. 12.

Freire, P., 1992, *Pedagogy of the Oppressed*, NewYork, NY: Continuum Publishing Company.

Heron, J., and Reason, P., 2001, 'The practice of co-operative inquiry: research "with" people rather than "on" people', in P. Reason, and H. Bradbury, eds, *Handbook of Action Research: Participative Inquiry and Practice*, London: Sage Publications Ltd.

Hnatiuk, C., 2012, 'Mentoring nurses towards success', *Academy of Medical-Surgical Nurses*, Vol. 21, No. 5, pp. 9–11.

Keiter Humbert, T., Burket, A., Deveney, R., and Kennedy, K., 2011,'Occupational therapy practitioners' perspectives regarding international cross-cultural work', *Australian Occupational Therapy Journal*, No. 58, pp. 300–309. https://doi.org/10.1111/j.1440-1630.2010.00915.x

Lee, V.S., DeZure, D., Debowski, S., Ho, A., and Li, K., 2013, 'Enhancing international collaboration among academic developers in established and emerging contexts: moving toward a post-colonial perspective', *International Journal for Academic Development*, Vol. 18, No. 1, pp. 89–103. https://doi.org/10.1080/1360144X.2011.616590

Metcalfe, S., 2010, 'Educational innovation: collaborative mentoring for future leaders', *Creative Nursing*, Vol. 16, No. 4, pp. 167–170. https://doi.org/10.1891/1078-4535.16.4.167

Mezirow, J., 2000, *Learning as Transformation: Critical Perspectives on a Theory in Progress*, San Francisco, CA: Jossey-Bass.

Naidoo, J., and Wills, J., 2009, *Foundations of Community Health*, 3rd ed., Edinburgh, Scotland: Bailliere Tindall.

Pritchard, E., and Gidman, J., 2012, 'Effective mentoring in the community', *British Journal of Community Nursing*, Vol. 17, No. 3, pp. 119–124. https://doi.org/10.12968/bjcn.2012.17.3.119

Purnell, L., 2005, 'The Purnell model of cultural competence', *The Journal of Multicultural Nursing and Health*, Vol. 11, No. 2, pp. 7–15.

Randall, N., Heaslip, P., and Morrison, D., 2013, 'Campus-based Educational Development and Professional Learning: Dimensions & Directions', Vancouver, BC, Canada: BC campus wiki.

Rogers, Y., Sharp, H., and Preece, J., 2011, 'Data gathering', In, *Interaction Design: Beyond Human-computer Interaction*, 3rd ed., p. 222–268, West Sussex, UK: John Wiley & Sons Ltd.

Tobin, M., 2004, 'Mentoring: seven roles and some specifics', *American Journal of Respiratory and Critical Care Medicine*, No. 170, pp. 114–117. https://doi.org/10.1164/rccm.2405004

Waterman, M., Weber, J., Pracht, C., Conway, K., Kunz, D., Evans, B., Hoffman, S., Smentkowski, B., and Starrett, D., 2010, 'Preparing scholars of teaching and learning using a model of collaborative peer consulting and action research', *International Journal of Teaching and Learning in Higher Education*, Vol. 22, No. 2, pp. 140–151.

Wroten, S., and Waite, R., 2009, 'A call to action: mentoring within the nursing profession – a wonderful gift to give and share', *ABNF Journal*, Vol. 20, No. 4, pp. 106–8.

Quality Assurance Self-assessment: A Catalyst at Aga Khan University

Tashmin Khamis* & Khairunnisa Dhamani**

Abstract

This article describes the establishment of the Aga Khan University's Network of Quality Assurance and Improvement in promoting the principles of quality in its programmes. As an international university, the experiences and lessons learned have the potential to inform quality assurance and improvement in similar contexts. The authors reflect on past attempts to improve the quality of educational offerings, which were primarily traditional quality assurance audits. With the advent of the Inter-University Council for East Africa self-assessment process, the next generation of quality assurance and improvement was launched for the Aga Khan University programmes. They found the self-assessment process effective in changing attitudes towards quality enhancement and implementation of improvement plans, because it created ownership in the process. Practically, self-assessment is an important tool for academic quality assurance providing critical feedback, and catalysing action. The article will be useful for those establishing quality teaching and learning units across multi-site, multi-campus universities, especially in resource challenged environments.

Keywords: higher education, quality assurance and improvement, academic development, resource challenged environments

*   Director, AKU Networks of Quality, Teaching and Learning, Office of the Provost, Aga Khan University, Nairobi, Kenya. E-mail: tashmin.khamis@aku.edu
**   The Aga Khan University School of Nursing & Midwifery, Dar es Salaam, Tanzania. E-mail: khairunnisa.dhamani@aku.edu

Résumé

Le présent article est une description de la mise en place du Réseau de l'Assurance et de l'Amélioration de la qualité de l'Université Aga Khan par la promotion des principes de la qualité dans ses programmes. En tant qu'université internationale, les expériences et leçons apprises peuvent potentiellement informer sur l'assurance et l'amélioration dans des contextes similaires. Les auteurs mènent la réflexion sur les efforts consentis par le passé pour l'amélioration de la qualité des offres d'enseignement, qui étaient principalement des audits traditionnels de l'assurance qualité. Avec la mise sur pied du Conseil interuniversitaire pour le processus d'autoévaluation de l'Afrique de l'Est, la prochaine génération d'assurance et d'amélioration de la qualité a été lancée pour les programmes de l'Université Aga Khan. Les auteurs ont trouvé le processus d'autoévaluation efficace dans le changement des attitudes concernant l'amélioration et la mise en œuvre des plans d'amélioration, parce qu'elle a permis l'appropriation du processus. Pratiquement, l'autoévaluation est un outil important pour l'assurance qualité de l'enseignement par les commentaires critiques, et la mobilisation d'actions. L'article sera utile pour ceux qui souhaitent mettre en place des cellules d'enseignement et d'apprentissage dans les universités multi-site, multi-campus, particulièrement dans les environnements en difficulté de ressources.

Mots clés : enseignement supérieur, assurance et amélioration de la qualité, développement académique, environnements en difficulté de ressources

Introduction and Background

Building and investing in a sound higher education system is key to forging the future of nations and their economies yielding 'an inclusive and diverse knowledge society to advance research, innovation and creativity' (Teferra 2013:2). For meaningful and sustainable development, it is imperative that appropriate resources are committed to quality of programmes in higher education (Teferra 2013:2). Driven by its mission for human development, the Aga Khan University (AKU) is producing leaders and quality graduates who do and will transform society for the better (Rasul 2012).

Founded by the Aga Khan in 1983, the major focuses of AKU are in the fields of health and education. AKU currently offers programmes in eight countries spread over three continents. In Pakistan, the palette includes a medical college, school of nursing, teaching hospital, as well as the Institute for Educational Development (IED), which includes professional development centres in Gilgit-Baltistan and Chitral, and the Examination Board in Karachi. In London (United Kingdom), the Institute for the Study of Muslim Civilisations offers a graduate degree in Muslim cultures. In East Africa,

AKU offers programmes in advanced nursing studies (Kenya, Uganda and Tanzania), postgraduate medical education (Kenya and Tanzania), and the Master of Education at IED (Tanzania). These programmes are supported by a 250-bedteaching hospital (Aga Khan University Hospital in Nairobi) and Aga Khan Hospital in Dar es Salaam. AKU is also working with the governments of Syria, Egypt and Afghanistan to improve the nursing and medical education curriculum, teaching standards and clinical practice.

This paper will focus on the efforts across the East African Advanced Nursing Studies programmes which undertook a quality assurance/improvement initiative in 2013–2014.

Quality Assurance in the Advanced Nursing Studies Programmes

To meet the needs of a changing society with increasing professional and health sector market demands, AKU has historically reviewed its programmes to inform status as well as to plan the development of new offerings.
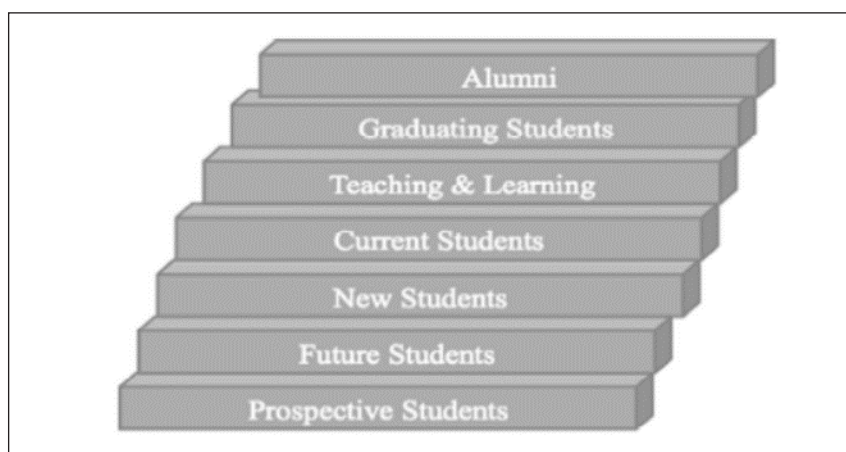

Figure 1: Quality Assurance Framework for Academic Programmes

The Quality Assurance Context at AKU: pre-2012

Processes were in place to assess quality assurance at AKU which were largely peer reviews of programmes, either internally or through use of external evaluators. A quality assurance framework at AKU was established in 2009 focusing on the student experience. The aim of this framework, known as the 'Student's Journey' (Figure 1) was to focus quality assurance mechanisms on the students as they progressed through the academic system across all programmes. The framework focused on the various steps a student takes from considering an AKU

programme through application and, if successful, enrolment and navigation of the learning experience, before emerging a graduate and alumni of AKU. The framework looked at how the student experience could be strengthened at each stage of the journey. At this point our efforts were primarily rooted in work of Gibbs (2010, 2012) which considered the dimensions of quality in higher education institutions and how too often the wrong dimensions were captured or highlighted. In essence, quality rankings were often not actually addressing teaching quality and/or educational outcomes (Pascarella 2001; Gibbs 2010). Gibbs (2010) further identified that most indicators are process rather than product variables as reflected in the Table 1.

Table 1: Educational Outcome Indicators.

Quality of student intake (entry standards)
Class size (and close contact with faculty, but not class contact hours, nor necessarily low student to staff ratios)
Pedagogical practices that engender student engagement (participatory teaching methods; collaborative learning; extent and quality of student-faculty interaction; level of academic challenge)
Quantity and quality of feedback to students and clear expectations on goals, standards and assessments (rubrics) that promote 'deep' rather than 'surface' learning approaches
Whether teaching is valued, rewarded, supported and funded and opportunities exist for peer engagement for teacher improvement

In 2010, at AKUANS, through a series of faculty retreats on curriculum review, the faculty identified the need to develop a baseline understanding of the current quality assurance processes, at each of the steps of the student journey in order to guide quality assurance priorities, develop quality metrics to benchmark against, and identify ways forward. To ensure the baseline reviews were conducted in a systematic and participatory way, the Programme Director for Quality Assurance conducted three-day visits to each campus (in Kenya, Uganda and Tanzania) between September and November 2010. During these visits, data were collected using the following methods:

- class observations: at least two classes per campus;
- SWOT analysis with faculty;
- interview with registrar's offices;
- focus group discussions with current enrolled nurse to registered nursing (EN-RN) and registered nurse to bachelor of science in nursing (RN-BScN) students.

- focus group discussions with alumni;
- semi-structured interviews with the foundation dean, academic heads and programme coordinators;
- employer interviews (face-to-face or by telephone): at least two per campus;
- documentation review of student evaluations.

The selection and creation of the tools was based on the student journey framework as well as Gibbs' Dimensions of Quality indicators described previously. The data collected were triangulated with the results of the initial baseline reviews completed by the management teams (academic heads and programme coordinators). In order to ensure that quality assurance needs or priorities identified would be acted on effectively, all recommendations were necessarily evidence based, inclusive of students' voices, and process ownership was felt by management and the faculty. The Programme Director then developed a report of the findings, in consultation with the Dean.

Despite the participatory methods of data collection, it was evident that, when findings and recommendations were shared, the faculty felt the report was owned by the senior management team, rather than themselves. Their responses to the reports were dismissive and often defensive of areas of critique and weaknesses. Thus, the recommended actions were largely seen as driven or contrived by academic management, especially in the priority area identified which was the imperative for faculty educational development to strengthen the teaching learning experience.

At this point it was recognised that a new innovative approach would be necessary to move forward positively on the quality assurance efforts.

The Journey Shifts: Post-2012

Coincidentally, an evolving momentum for quality assurance in higher learning environments was afoot in East Africa. As the East African Community came together, the Inter-University Council for East Africa (IUCEA) were tasked with working together with the various Commissions of Higher Education, particularly in Kenya, Tanzania and Uganda, to harmonise higher education structures to enable mobilisation of students and graduates across the region. Initiatives being implemented in East Africa to bolster quality and harmonisation of curricula include subject benchmarking; the credit and accumulation transfer system that sets minimum academic standards for different disciplines and programmes; implementation of a regional higher education qualifications framework; and principles and guidelines for quality assurance in higher education in East Africa. In this

regard, the IUCEA partnered on the Dialogue on Innovative Education Strategies initiative with the German Academic Exchange Service and the German Rectors' Conference to enhance quality of higher education in the East African region. Learning from the Bologna harmonisation process in Europe, the IUCEA has developed a quality assurance handbook *A Road Map to Quality* which includes four volumes to support universities in East Africa to implement good practices for quality assurance at the programme and institutional level, as well as to guide establishment of effective internal quality assurance mechanisms and directorates in universities in the region, that are aligned to international standards. The IUCEA partnered with the regulatory Commissions of Higher Education and select universities to pilot the first of these handbooks, *Volume 1: Guidelines for Self-Assessment at Program Level* (IUCEA 2010).

In 2012, the opportunity to participate in a pilot project was offered which would focus on a new model of quality assurance. Given their recent experience and ongoing struggles with the quality assurance process, it was decided that the post-registration Bachelor of Science of Nursing (Post-RN-BScN) programme at the AKU Advanced Nursing Studies (AKUANS) in Tanzania and Kenya would embark on the self-assessment quality assurance process with the intent of developing a quality improvement plan. This project was initiated by the IUCEA in collaboration with development partners, specifically, the German Academic Exchange Service and the German Rectors' Conference, as well as the national higher education regulatory bodies of the participating East African countries. Through use of IUCEA's *Handbook for Quality Assurance in Higher Education* (2010), the self-assessment teams outlined the parameters for quality assurance and tool implementation guidance.

The AKU senior management was highly supportive of this initiative with the Dean of Nursing appointing chairs and members to self-assessment teams in each setting. The teams comprised faculty members, student representatives and members of support staff, including a student record officer, human resource personnel and an academic liaison officer. Under the Office of the Provost, the AKU Network of Quality Assurance and Improvement supported theself-assessment teams with training and guidance on the process as well as ensuring that all findings were backed by documented evidence. Essentially, similar stakeholders were participating in this second quality assurance audit (as the one described previously) but the major difference was that the self-assessment teams were internally led rather than headed by the senior management team.

Training of Self-assessment Teams

Two of the authors, both academic staff at AKU, participated in the third cohort of the IUCEA Quality Assurance training. With this knowledge and expertise, they organised and conducted a workshop for the East African self-assessment team outlining the details of the project and the process of conducting programme self-assessment. The training emphasised five steps of the self-assessment process: (1) preparation of the self-assessment;(2) data collection and documenting evidence; (3) analysis of information; (4) evaluation; and (5) writing a self-assessment report including the improvement plan. The overall purpose of this effort was to launch an evaluative process for the Post-RN-BScN programme and makere commendations for its quality improvement.

The East African self-assessment team was divided into three groups to work on process, inputs and quality assurance cells on the analysis model for self-assessment. As depicted in Figure 2, the analysis model consists of eighteen cells categorised into three dimensions, specifically quality of the input, quality of the process and quality of the output. This model was foundational to guiding the team to systematically and rigorously assess the multiple dimensions contributing to the quality of education (IUCEA 2010). At the onset, the groups were challenged to populate each cell with evidence to achievement and quality. During this process of populating each cell, it was evident that there was replication of information and exemplars across cells, which was interpreted as integrative and validating. Each cell was described and critically analysed to understand the current situation within the programme and then to decide whether performance was satisfactory, evolving or needing improvement. For example, Cell Number One focused on inputs from various stakeholders when establishing or revising a programme (see Table 2). The description of this cell contained information related to various stakeholders including accreditation bodies within the university and outside the university such as nursing councils, Ministries of Health and Commissions of Higher Education in both Tanzania and Kenya. Critical analysis of the cell indicated that the programme met the relevant needs and requirements of the government and key stakeholders including alumni and employers; however, no tracer study was conducted and there was no database for stakeholders' requirements. The analysis allowed rating this cell using a scale of 1–7.

Table 2: Exemplar Content of Cell Number One from AKU Self-Assessment Team

Cell #/ Name	Cell Description	Evidence Sought	Strengths	Weaknesses	Score /7
#1 Require-ments of Stakehold-ers	Faculty/depart-ment responsi-ble has a clear understanding about the rel-evant demands of stakeholders -Ministries of Health -Commissions of Higher Edu-cation -Employers -Alumni	-Interim Authorities/ Certificate of Registration -Nursing Council Ap-provals -Satisfaction surveys -Evaluation reports	-Pioneer program -Non-impacting of current workforce -Highly -innova-tive pro-gramme	-No tracer study -No database of stakeholder requirements -Lack of structured forum to determine needs -Data uptake and utilisa-tion strategies	

As part of the evidence, various documents, such as letters of Interim Authority or Certificate of Full Registration from the respective Commissions of Higher Education, Nursing Councils' approval of the RN-BScN curriculum, alumni and employer satisfaction survey reports and external evaluation reports, were sought. The fourth step required the self-assessment team to mention strengths and weaknesses of this cell followed by the last step to discuss an improvement plan. For example, the team's contribution stated:

> There is evidence that the programme largely meets the stakeholders' requirements as seen in the curriculum and various documents. The programme meets the requirements of the government regulatory bodies, as well as the labor market as indicated through a stakeholder satisfaction survey. As a pioneer work-study programme, the programme addresses the unique learning needs of working nurses without affecting the critical shortage of nurses at their places of employment. However, there is no clear evidence in the documents reviewed to suggest that the programme is based on the clear understanding of the requirements by the stakeholders (Self-Assessment Team, Kenya 2013:16).

To address the shortcomings, the team indicated various strategies such as: conducting a tracer study, establishing a database for stakeholder requirements and expectations; holding structured forums to identify the needs and requirements of key stakeholders; and also establishing strategies for using the data from stakeholders to inform the programme in line with their requirements (Self-Assessment Team Kenya and Tanzania 2013).

These steps were essential to assess each cell's factors/content for level of quality. As the process continued, the group members brainstormed on possible strategies to address or mediate the problems/weaknesses in the respective cells. It was also noted that despite the model's depiction of a linear relationship between cells, the quality of each cell was seen to impact all three dimensions, which was made evident through the application of the model.

Learning from the Pilot

There were a number of elements of the new process that were viewed favourably by the faculty and management. Firstly, there was a greater sense of ownership of the reporting and ensuing improvement plan created by the East African quality assurance team. They wrote the reports, provided the context and insights, and shared the findings, which was both empowering and reflective. Secondly, there was a positive response to the quality assurance efforts even though the analysis of weaknesses resulted in greater criticism than had been evidenced in the previous audit which had met with major resistance. It is interesting that, despite similar findings and recommendations of the two reports (especially in the area of the need for faculty development in the area of teaching/learning), there was acceptance and acknowledgement of the latter document.

A number of changes have occurred at AKU to strategically align with the promotion of quality in student intake and excellence in teaching and learning as a result of the experiences in this pilot. There has been the establishment of the Quality Assurance Directorate (university wide) which provides guidance, experiences and policy to move this agenda positively. Further, in January 2013, the Provost announced the establishment of four networks: Teaching and Learning (TL_net) including Blended and Digital Learning (BDL_net), Quality Assurance and Improvement (QAI_net), and Student Experience (SE_net). The TL_Net and QAI_Net both focus on quality assurance and improvement of the learning environments. Mandates of the QAI_Net and TL_Net are intertwined in the efforts to strengthen the student learning experience at AKU, with the former focusing on continuous monitoring of academic programmes and the latter on professional development of the faculty. By supporting the faculty to teach students in engaging ways, the learning outcomes of AKU graduates will be realised, that is, students who can think critically, solve problems, work in teams and be leaders, lifelong learners and catalysts for change. Such a learner-centred environment ensures quality programmes, quality graduates and a quality faculty.

In addition, the IUCEA process has been adopted and embedded into the AKU Academic Quality Framework in March 2015, following the positive results from the ANS pilot. The AKU Academic Quality Framework is intended to promote improvement, assure the quality of learning opportunities and the standards of AKU programmes and awards, and provide evidence of quality assurance to stakeholders. From a practical level, this means that there will be a predictable cyclical review of all programmes. Every programme will be subject to periodic review every five years, consisting of self-assessment, external peer review and monitoring of resulting improvement plans through an annual self-monitoring process.

Acknowledgements

Disclosure Statement

References

Gibbs, G., 2010, *Dimensions of Quality*, London, UK: Higher Education Academy.

Gibbs, G., 2012, *Implications of 'Dimensions of Quality' in a Market Environment*, London, UK: Higher Education Academy.

Inter-University Council for East Africa/German Academic Exchange Service (IUCEA/DAAD), 2010, *A Road Map to Quality: Handbook for Quality Assurance in Higher Education. Volume 1: Guidelines for Self-Assessment at Program Level*, Nairobi, Kenya: IUCEA/DAAD.

Pascarella, E.T., 2001, Identifying excellence in undergraduate education: are we even close? *Change*, 33(3), 19-23.

Rasul, F., 2012, *The Aga Khan University Report*, Karachi, Pakistan: The Aga Khan University.

Self-Assessment Committee, 2013, *Self-assessment Reporting: Registered Nursing to Bachelor of Science in Nursing Programme* (unpublished), Nairobi, Kenya: The Aga Khan University.

Self-Assessment Committee, 2013, *Quality first: Self-assessment report of post Registered Nurse – Bachelor of Science in Nursing programme* (unpublished), Dar es Salaam, Tanzania: AKU-Tanzania Institute of Higher Education Advanced Nursing Studies Programme.

Teferra, D., ed., 2013, *Funding Higher Education in Sub-Saharan Africa*, New York, NY: Palgrave MacMillan.

Assessing the Cognitive Domain through MCQs: Critical to Quality Assurance in Higher Education

Khairunnisa Aziz Dhamani* & Zeenatkhanu Kanji**

Abstract

While establishing assessment methods as a critical element of quality assurance, one must not lose sight of the intent to measure both expected learning outcomes and intended programme objectives. The achievement of quality assessment is rooted in ensuring that the content and approaches to delivery produce graduates and programmes which are high quality. One of the most common strategies to assessing higher order cognitive domain is via Multiple Choice Questions (MCQs). In this paper we will reflect on a quality assurance effort to ensure that this strategy was appropriate (doing the right thing), necessary (for the right reasons) and sufficient (achieving the desired results) in meeting the requirements. An exemplar of a continuing professional development approach to the constructing, measuring and evaluation of MCQs is provided, which emphasised the imperative of both faculty (peer) and organisational commitment to the process and achieving the desired product of competent and successful graduates.

Résumé

En établissant les méthodes d'évaluation comme élément clé de l'assurance qualité, l'on ne doit perdre de vue le but de mesurer les résultats d'apprentissage attendus et les objectifs visés pour le programme. La réalisation de l'évaluation de la qualité cherche à garantir la production de diplômés et de programmes de haute qualité à travers les contenus et les approches d'exécution. L'une des

* School of Nursing and Midwifery, Aga Khan University, Dar es Salaam, Tanzania.
  Email: khairunnisadhamani@gmail.com
** School of Nursing and Midwifery, Aga Khan University, Dar es Salaam, Tanzania.
  Email: zeenatkhanukanji70@gmail.com

stratégies les plus fréquemment utilisées dans l'évaluation du domaine cognitif de niveau supérieur est celle via les questions à choix multiples (QCM). Dans le présent article, notre réflexion sera axée sur l'effort de l'assurance qualité pour avoir une stratégie appropriée (bien faire), nécessaire (pour les bonnes raisons) et suffisante (obtenir les résultats escomptés) en répondant aux exigences. Un modèle de l'approche de développement professionnel continu est fourni pour construire, mesurer et évaluer les QCM, ce qui a mis en avant l'obligation de considérer l'engagement à la fois de la faculté (pair) et organisationnel dans le processus de réalisation du produit de diplômés compétents et qui réussissent.

Introduction

Assessment methods are designed to measure the expected learning outcomes and intended programme objectives (IUCEA 2010). They also form one of the critical elements of quality assurance mechanisms for the curriculum. Of importance to quality assurance is the role of assessment methods to improve results and/or catalyse students' learning outcomes. The expected learning outcomes of the course or the programme guide the faculty to develop teaching activities and to inform the design and implementation of appropriate assessment and evaluation strategies (McDonald 2007). Evaluation serves as one of the basic means of assuring quality in the teaching–learning process (Bourke and Ihrke 2012). Hence, there is an imperative for well-designed, appropriate and diverse instructional methods and assessment strategies in order to assess and produce competent graduates.

A variety of approaches are used to assess the learning outcomes in relation to various domains. This paper focuses on the authors' experiences of assessing a higher order cognitive domain by a well-constructed and analysed high stake multiple choice questions (MCQs). Additionally, the paper highlights the important role played by educators in preparing this kind of questions.

Quality Assurance Guidelines on Assessment

According to resources from the Inter-University Council for East Africa (IUCEA), when looking for quality in any aspect of higher education, there are three main guiding questions. First, 'Are we doing the right things?; second, 'Are we doing the right things in the right way?' and third, 'Do we achieve our goals?' (IUCEA 2010:6).

In terms of utilising MCQs these questions lead the educators to scrutinise this strategy's potential to assess higher order cognitive and affective domains of students. In a recent effort to consider the effectiveness and efficacy (as part of the QA efforts) of MCQs, the faculty from the Aga Khan University in a Post-Registered Bachelor of Science in Nursing programme undertook

to ensure that the chosen strategy was appropriate in testing the required learning outcomes of the course.

Notionally it is important for educators and evaluators to be confident that the strategy being implemented for assessment is optimal – essentially the right method of assessment. However, choosing the right assessment method is not enough. Implicit and explicit to each method is a parallel aspect of building the measurement; hence, in the case of MCQs, knowing the technical aspects of constructing the right questions (Er, Ramamurthy and Pook 2014) including distractors and using a blueprint or Table of Specification (ToS). This knowledge and framework not only means increasing the likelihood of doing the right things in the right way every time, but also increases accountability for the decision path to such formulation and administration of MCQs. The cycle of assessment is not limited to the examination construction and administration (exam taking), but includes the faculty's capacity to analyse and interpret results of item analysis. This latter component contributes to the validity and reliability of the test instrument in the effort to ensure that the goal or the outcome was achieved. Finally, learners should receive timely feedback on their performance in the test as an element of the quality assurance programme. If we falter, omit or fail in any of these processes, quality is potentially compromised.

Doing the Right Thing: MCQs as a Tool of Assessment for Nursing Students

One of the most popular written assessment formats used is the standard four distractors MCQ tests with a forced choice, single best answer or response. If MCQs simply assess students' ability to recall information and/or comprehension, then their contribution to future work life and capacities may be limited and somewhat suspect. This has been a criticism of MCQs as pure recall content testing is simplistic and limited. Thus, there is a risk that an underdeveloped or minimalised assessment strategy will lead to superficial learning and miss the opportunity to engage students in higher order thinking such as application, analysis, synthesis and evaluation of knowledge acquired in their profession. It is, therefore, important that the assessment method is designed carefully to promote quality learning and teaching tools (Ramsden 2003).

There is lack of agreement among faculty members regarding the optimal number of distractors (i.e, four or five distractors per MCQ) as a means to decrease the percentage of random guessing the correct answer by the students. Vegada *et al.* (2016) carried out a random study with three groups of third-year medical students comparing three, four and five distractors and found that the three distractors per MCQ could be preferred above the four and five

distractors per MCQ. The quality parameters of MCQ test analysis showed no significant difference in reliability, validity and discriminatory index between the three groups (Vegada *et al.* 2016). Although there was normal distribution of scores and two functional distracters per question on the MCQ test for all three groups in this study, the mean score was higher while the average time taken for completing the exam was less for the group who had three distractors in the MCQ test. Similarly, Tarrant and Ware (2010) compared four distractors of MCQ test by re-writing the same questions as three distractors questions. Item analysis was done to remove the distractor with the least response. Comparisons of the three and four distractors given to two student cohorts over two academic years showed minimal difference in the item analysis of difficulty and discriminatory index (Tarrant and Ware 2008). The findings indicated that both three and four distractors of MCQs work equally well. Moreover, MCQs with three distractors take less time to construct and administer. It also means that more content could be tested by giving the students more MCQs in a single examination. Hence, there appears to be both rationale and merit in using three distractors per MCQ (Rodriguez, 2005).

This criticism and scrutiny of MCQs has been taken very seriously in professional education, such as nursing, where faculty and programme directors recognise that there is an imperative to use such measurements to test higher levels of cognitive development. MCQs are the foundation of a number of national nursing examination platforms such as the NC-LEX©, which implies a high level of confidence in this assessment strategy to measure beyond content. The strengths of MCQs include the ability for the faculty to directly assess content and course objectives in a succinct and direct manner – more so than other written assessment methods. MCQ tools are easy to administer and score, which enables mass assessment of students. And, perhaps of greatest importance, is the ease of item analysis which enables a rapid and measurable quality assessment of each item (Vegada *et al.* 2016).

For the Right Reasons? MCQs and Higher Order Understanding in Nursing Students

In recent years, in nursing programmes, we have seen a capacity growth in the use, development and assessment of MCQs. The existence of evidence-based guidelines for building, administering and assessing MCQs further provides the rationales for this approach (Bandaranayake 2008; Considine, Botti and Thomas 2005; Haladyn, Downing and Rodriquez 2002). One of the mechanisms has been the use of MCQs constructed in parallel with clinical vignettes (often actual scenarios from the practice settings), which allow appropriate assessment of nursing students' theoretical knowledge and application to nursing practice.

Achieving our Goals: MCQs as Capacity and Quality Assurance Measures

Nurse educators have both the legal and ethical responsibility to ensure the evaluation of students is valid, effective and reflects their potential to practise safely and knowledgeably (National League for Nursing 2005; Tarrant, Knierim, Hayes and Ware 2006). However, in many cases, the members of nursing faculties are recruited based on clinical and academic achievements, with little consideration of educator capacities, often leading to a disjoint between what they know about teaching/assessment and what they think they know (Ramsden 2003). According to McDonald (2007), the quality of a measurement instrument, such as test/exam, depends on assessment competency of the faculty. However, when inadequacy is experienced in the faculty, the instruments developed tend to provide invalid and unreliable results (Downing 2005; Tarrant *et al.* 2006). Hence, one way to improve tests/exams is to enhance nurse educators' skills in identifying learning outcomes of the course being assessed; developing ToS; constructing exam/test items; and analysing results of the exam (McDonald 2007).

A well-developed test/instrument using a ToS promotes validity and enhances the likelihood of items in the test matching outcomes and content (McDonald 2007). However, it requires time and proper planning on behalf of the faculty. Historically, many faculties fail to recognise the linkage which often yields test items which do not test the required higher level cognitive skills (Morrison and Free 2001).

An Exemplar

In 2012, the primary author of this paper conducted continuing professional development (CPD) sessions for the nursing faculty on developing a ToS or a blueprint in order to address this perceived deficit within a small nursing faculty at a private university in East Africa. The CPD was considered incomplete and insufficient as the faculty continued to face the challenge of constructing appropriate test/exam items to measure the desired content and outcomes. It was realised that regardless of the integrity and intactness of the ToS, without proper construction of test/exam items, the exam was invalid. Therefore, in October 2014, a workshop on developing MCQs test items was conducted. During the workshop, a sample of previously used MCQs was provided for the faculty to assess the quality of questions. The faculty realised that many questions were ambiguous, had grammatical and spelling errors and lacked the focus of what was being tested. Of greater importance, was the recognition that the faculty lacked skills in interpreting

test scores. As a result of this foundational gap, the second author of this paper started offering CPD to a few faculty members on item analysis, with the intention of a formal roll out of this education programme in faculties of two other countries of East Africa. Statistically analysing test data assures that tests are functioning as intended (McDonald 2007).

CPD on item analysis was given to a few faculties and this exercise was done for three semesters. This meant covering all the nursing courses in the undergraduate nursing programme. The faculty carried out item analysis of the MCQs of their respective courses. As each faculty became familiar with the process, they realised the importance of item analysis. For example, they realised the errors with their answer key, having ambiguous distractors, increasing chances of guesswork by having correct distractor longer or more complete than others, a word or phrase included in the stem and in the correct answer, and the need to improve/revise test items for future use.

As a step towards quality assurance, the nursing department of the university started a peer review process of exam papers developed by the content expert faculty member who taught the course. This effort included reviewing the MCQs as well as short and long essay questions to identify any gaps in the exam paper comparing with the outline of the ToS and for any flaws in the construction of the questions before examining the students. Questions were revised according to the gaps identified. Presently this exercise occurs in every semester prior to the exam time; however, item analysis of MCQs continues to be done by only a few faculties. If every faculty engages in this two-pronged approach, it will ensure the reliability and validity of the test questions (Sadaf, Khan and Ali 2012). The future plan is to roll out CPD sessions on item analysis for all the nursing faculties. This will provide an opportunity to write good MCQs, as well as improve teaching, and student learning outcomes (Talebi, Ghaffari, Eskandarzadeh and Oskouei 2013).

Conclusion

Assessment strategies need to receive the attention they deserve and it is critical to enhance educators' skills in identifying learning outcomes being assessed, developing a table of specification and constructing and analysing high quality test items to assess the desired learning outcomes. Life-long learning activities, including CPDs, will facilitate and expand the expertise in teaching and education, thereby providing faculty members with capacities and experiences to improve their skills and knowledge regarding MCQs. In addition, there is a clear requirement for organisational commitment to the process, such as peer review opportunities of evaluative tools, in order to achieve the desired product of competent and successful graduates.

References

Bandaranayake, R., 2008, 'Setting and maintaining standards in multiple choice examinations: AMEE guide No.37', *Medical Teache*r, No. 30, pp. 836–845. Available online at https://doi:10.1080/01421590802402247.

Bourke, M. P., and Ihrke, B. A., 2012, 'The evaluation process: an overview', in D. M. Billings, and J. A. Halstead, *Teaching in nursing: a guide for faculty*, 5th ed., pp. 422–440, St. Louis, MO: Elsevier Saunders.

Considine, J., Botti, M. and Thomas, S., 2005, 'Design, format, validity, and reliability of multiple choice questions for use in nursing research and education', *Collegian*, No. 12, pp. 19–24. Available online at https://doi:10.1016/S1322-7696(08)60478-3.

Downing, S., 2005, 'The effects of violating standard item writing principles on tests and students: The consequences of using flawed test items on achievement examinations in medical education', *Advances in Health Sciences Education*, No. 10, pp. 133–143. Available online at https://doi.org/10.1007/s10459-004-4019-5.

Er, H. M., Ramamurthy, S., and Pook, P. C. K., 2014, 'Can learning outcomes in cognitive domain be assessed effectively using multiple choice questions? A study in an undergraduate pharmacy curriculum'. *International E-Journal of Science Medical and Education (IeJSME)*, Vol. 8, No. 3, pp. 9–18. Available online at https://doi: 10.1007/s10459004-4019-5.

Haladyna, T., Downing, S., and Rodriquez, M., 2002, 'A review of multiple-choice item writing guidelines for classroom assessment', *Applied Measurement in Education*, Vol. 15, No. 3, pp. 309-334. Available online at https://doi: 10.1207/S15324818AME1503_5.

Inter-University Council for East Africa (IUCEA), 2010, *A Road Map to Quality: Handbook for Quality Assurance in Higher Education, Volume 1: Guidelines for Self-assessment at Program Level*, The Inter-University Council for East Africa/ DAAD. Available online at http://iucea1.org/qawp/wp-content/uploads/2013/12/ Handbook-Volume-11.pdf.

McDonald, M. E., 2007, *The Nurse Educator's Guide to Assessing Learning Outcomes*, Sudbury, MA: Jones & Bartlett.

Morrison, S., and Walsh Free, K. (2001). 'Writing multiple choice test items that promote and measure critical thinking', *Journal of Nursing Education,* 40(1), 17–24.

National League for Nursing, 2005, 'Core competencies of nurse educators'. (http:// www.nln.org/profdev/corecompetencies.pdf).

Ramsden, P., 2003, *Learning to Teach in Higher Education*, Routledge New York: Falmer.

Rodriguez, M. C., 2005, 'Three options are optimal for multiple choice items: a meta-analysis of 80 years of research', *Educational Measures Issues and Practices*, No. 24, pp. 3–13. Available online at https://doi.org/10.1111/j.1745-3992.2005.00006.x.

Sadaf, S., Khan, S., and Ali, S. K., 2012, 'Tips for developing a valid and reliable bank of multiple choice questions (MCQs)', *Education for Health*, Vol. 25, No. 3, pp. 195–197. Available online at https://doi.org/10.4103/1357-6283.109786.

Talebi, G. A., Ghaffari, R., Eskandarzadeh, E., and Oskouei, O. E., 2013, 'Item analysis an effective tool for assessing exam quality, designing appropriate exam and determining weakness in teaching', *Research and Development in Medical Education*, Vol. 2, No. 2, pp. 69–72. Available online at https://doi:10.5681/rdme.2013.016.

Tarrant, M., Knierim, A., Hayes, S.K., and Ware, J., 2006, 'The frequency of item writing flaws in multiple choice questions used in high stakes nursing assessments', *Nurse Education Today*, Vol. 26, No. 8, pp. 662–671. Available online at https://doi:10.1016/j.nedt.2006.07.006.

Tarrant, M., and Ware, J., 2008, 'Impact of item-writing flaws in multiple choice questions on student achievement in high-stakes nursing assessments', *Medical Education*, No. 42, pp. 198–206. Available online at https://doi: 10.1111/j.1365-2923.2007.02957.x.

Tarrant, M., and Ware, J., 2010, 'A comparison of the psychometric properties of three – and four-option multiple-choice questions in nursing assessments', *Nurse Education Today*, No. 30, pp. 539–543. Available online at https://doi.org/10.1016/j.nedt.2009.11.002.

Vegada, B., Shukla, A., Khilnani, A., Charan, J., and Desai, C., 2016, 'Comparison between three option, four option and five option multiple choice question tests for quality parameters: A randomized study', *Indian Journal of Pharmacology*, Vol. 48, No. 5, pp. 571–575. Available at https://doi.org/10.4103/0253-7613.190757.