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

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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

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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.

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