

Deploying interactive on-line networking platform for improving quality and relevance of African University graduates to labour markets

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Abstract

African Higher Education Institutions (HEIs) face criticisms of producing low performing graduates unable to drive the agricultural innovation processes to revitalise agriculture, boost economic recovery, and accelerate achievement of the Millennium Development Goals (MDGs). The situation is largely attributed to graduates and lecturers having limited interaction with the labour market due to lacking effective administration and academic frameworks to open opportunities for learning practical lessons relevant to the needs of the labour market. Universities being vital to national innovation systems and the development of human resource, three universities in Kenya and Uganda have partnered with labour market actors to close this gap by deploying innovative interactive online technology networking platform. Networking will be facilitated to enable use of technology to change the way mentoring and learning take place by opening opportunities for institutional networking of Universities with a global pool of practicing professionals and the labour market. The approach is to jointly strengthen capacities in reforming graduate curricula, graduate training and education. This joint effort is being implemented with support from the European Union (EU) ACP-EU EDULINK II Project Grant Ref FED/2013/335-687 (Deploying Interactive On-line Networking Platform for Improving Quality and Relevance of African University Graduates to Labour Markets)

Key words: Graduates, Higher Education Institutions, Institutional networking, labour market

Résumé

Les établissements d'enseignement supérieur africains (EES) font face à des critiques de la production à faible rendement des diplômés, incapable de conduire les processus d'innovation agricole pour relancer l'agriculture, de stimuler la reprise économique, et d'accélérer la réalisation des Objectifs du Millénaire pour le développement (OMD). La situation est en grande partie attribuable à des diplômés et des professeurs ayant une interaction limitée avec le marché du travail en raison du manque administration efficace et des cadres

universitaires à ouvrir des possibilités d'apprentissage des leçons pratiques en rapport avec les besoins du marché du travail. Les universités étant vitales aux systèmes nationaux d'innovation et de développement des ressources humaines, trois universités du Kenya et de l'Ouganda ont conclu un partenariat avec les acteurs du marché du travail pour combler cet écart par le déploiement innovant de plate-forme de réseau de la technologie interactive en ligne. Ce réseau sera facilitée pour permettre l'utilisation de la technologie capable de changer la façon dont le mentorat et l'apprentissage se déroulent en ouvrant des possibilités de réseau institutionnel des Universités avec un pool mondial de professionnels en exercice et le marché du travail. L'approche consiste à renforcer conjointement les capacités de la réforme des programmes d'études supérieures, la formation universitaire et de l'éducation. Cet effort conjoint est mis en œuvre avec le soutien de du projet de l'Union Européenne (UE) ACP-UE EDULINK II, don no. de Réf FED/2013/335-687 (Déploiement Interactive de la Plate-forme de réseau en ligne pour améliorer la qualité et la pertinence de l'Université Africaine des diplômés aux marchés du travail)

Mots clés: diplômés, établissements d'enseignement supérieur, les réseaux institutionnels, marché du travail

Background

The Agriculture and Food Security sector in Africa where over 80% and 70%, respectively of the population derive livelihoods and full time employment is recording pervasive poor performance. This is exposing the growing African population to continued risk of poverty, food insecurity, youth unemployment, and environmental degradation and slowing the attainment of the MDGs, particularly 1, 7 and 8. To a large extent, this can be linked to Higher Education Institutions (HEIs) producing low performing graduates who are unable to drive the agricultural innovation processes to revitalise agriculture, boost economic recovery, accelerate achievement of the 6% annual growth target set under the Comprehensive African Agricultural Development Programme (CAADP). The HEIs are vital to national innovation systems and the development of human resource base and have to foster capacity building mechanisms for delivering quality graduate education and training which is responsive to the demands of agricultural labour market.

Challenges Universities face in delivering quality graduate education

The criticisms by the labour market directed at universities on human resource development are on the curriculum and quality of the graduates in relevance to requirements in the labour market. There is the concern that employability of the agricultural graduates is diminishing because the agricultural labour market is expressing low confidence on them and demanding for more fit-for-purpose graduates.

Universities have been experiencing overwhelming lecturer-to-student ratios and declining public funding, which is adversely impacting on the quality of mentorship that the graduates receive. The face-to-face conventional learning, teaching and supervision approaches used

by many faculty staff has failed to effectively cope with the surging numbers of graduate students and is weakening quality of supervision and mentorship.

Many graduates have difficulties writing quality research publication with rejection of submitted manuscripts frequent because of high level of plagiarism, improper analysis and interpretation of research data and poor presentation of results. Further, the graduate alumni are insufficiently networked with their peers and mentors and fail to gain confidence of the labour market.

Response by Universities to challenges in graduate education

Universities are searching for innovative ways of using technology to change the way graduate mentorship, teaching and learning take place. Preference should be for the innovative and cost-effective solutions to the challenges faced in matching graduate training with the labour market needs. One of the solutions that should receive attention is tapping on the heavy public investment in ICT infrastructure expansion in Africa which still lacks vibrant online educational and research communities to produce and disseminate viable content to stakeholders.

The increased public investment in fibre optic cables and ICT upgrading in African countries offers opportunities to complement face-to-face contacts in graduate education. This is possible with deploying user-friendly, interactive on-line technology platforms to enable universities efficiently and effectively supervise, mentor, track and network their graduates, graduate alumni and faculty staff with community of researchers, academics, practicing professionals and the agricultural labour market. In using upgraded ICT facilities in education, the Universities would gain added value by adapting a business model to encourage participation of target groups and beneficiaries in labour needs assessment to be fed into improving the design of the platform and ease access to training services and facilities for the students. ICT application appeals to the private sector therefore would potentially attract financial investment needed to ensure sustainability of the initiative.

Approaches involving actors from the labour market in graduate curriculum and education delivery has the advantage of allowing for continuous integration of the competencies of relevance to the labour market into graduate mentorship and updating the faculty on trends in the labour market. This necessitates that universities forge synergistic partnerships with diverse stakeholders from the labour market. In Eastern Africa, three universities (Egerton University, Jomo Kenya University of Agriculture and Technology and Makerere University) have inter-institutional networking with a consortium of agricultural universities in Africa and in Europe to tap on expertise of large pool scientists to strengthen graduate mentorship capacities that an individual university is unable to access on its own.

A consortium playing this networking role in Africa is the RUFORUM- Regional Universities Forum for Capacity Building in Agriculture which is a consortium of 41 Universities from 18 countries in Eastern, Central and Southern Africa with a mandate of building capacity for agricultural postgraduate training and research in universities. A counterpart to RUFORUM

in Europe with complementary advantages is the European consortium of 31 agricultural universities and Research Institutions from 16 Member States and Switzerland - AGRINATURA. In addition to a network of knowledge institutions, partnership with private sector adds value especially when already have demonstrated capacity to deliver quality services in capacity building in the agricultural sector.

The partners from the private and NGO that the three East African Universities are bringing into action include the African Biodiversity Conservation and Innovations Centre (ABCIC), Futuristic Inc, the Forum for Agricultural Research in Africa (FARA) and African Women in Agricultural Research and Development (AWARD). These partners have built functional partnership working together with universities with their different, relevant and complementary experiences in various aspects of graduate training and research support as well as the application of ICT in training at postgraduate levels. Such a consortium of partners ensures local ownership as they jointly focus on an institutional capacity gap experienced in many African universities where the need for working solutions to challenges in graduate training and integration of labour market needs is urgent.

Outcomes of University partnership with labour market in graduate training

The deployment of interactive and open on-line technology platform in tracking, supervising and mentoring graduate students can facilitate the process of collecting and analysing Labour Market Information (LMI) to inform regular curricula review, upgrading or development and improve teaching delivery and research. Implementation of these activities should results in delivery of high quality programmes responsive to labour markets.

Building partnership between universities and different communities of professionals from academia, research, private and public sectors enriches supervision of graduate students and can be eased with deployment of an interactive on-line technology platform. The use of the interactive on-line technology platforms allows graduate students to access a large pool of professionals and experts for effective supervision and mentoring.

Participation in the interactive on-line technology platform increases interaction students have with their supervisors more than that currently possible with face-to-face contacts. Integrating on-line technology platform with software to detect plagiarism in graduate theses and publications will improve scientific quality of the research outputs which should benefit faculty staff gain professional prominence from their contributions and upgrade their qualifications for career advancement. Interaction with other experts will also contribute to upgrading of academic staff while various skills enhancement and general capacity building components of the action improve their qualification through “internationalization” of their competencies. In this way qualifications of academic staff will be upgraded.

Graduate Alumni are important component of the labour market and when brought into curriculum delivery has the added value of identifying the gaps in the current curriculum as well as linking the university with the labour market. Therefore mechanisms retaining active

link with graduate Alumni is beneficial in the mentoring, supervision, capacity building and professional advancement of the graduate students.

Academic exchanges, trainings and curricula reviews, piloting interactive on-line networking technology and interactions with labour markets is one way to open opportunities for increased mobility of postgraduate students and faculty staff. Lessons from such exchanges can then be mainstreamed into informing policies and development plans for strengthening management and academics in HEIs. Successes in the development of institutional framework for implementing open supervision and mentorship programmes can be out-scalable to other HEIs to influence improved institutional frameworks for academic programmes and excellence.

Conclusion

Universities have to better position themselves to respond to the challenges in graduate training and labour market needs with innovative and cost-effective yet interactive online platform for open supervision, mentoring and tracking of graduate students. This kind of action will tap on the heavy investment in ICT infrastructure expansion in the region which lacks vibrant online educational and research communities to produce and disseminate viable content to stakeholders.

Building working partnership with private and NGO sector in graduate education and training is urgent for universities because generation of knowledge influencing agricultural development trends is no longer a preserve of the universities. Consequently, adaptation of business models when partnering with private and NGO actors will prove valuable to widen access to training services and facilities and continuously update priority set of competencies relevant to the labour market. This will be a factor in sustainable partner initiatives in the deployment of user-friendly, interactive on-line technology platforms for supervising, mentoring, tracking and networking graduates, graduate alumni and faculty staff with community of researchers, academics, practicing professionals and the agricultural labour market.

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