Retooling East African University Staff for the Digital Age

Executive Summary
There is increasing need amongst universities in East Africa to enhance the penetration of ICTs into all university functions and activities. To address this need, universities need to continuously train their staff in existing and emerging educational technologies to provide them with functional skills for effective utilization of these technologies in their day to day activities. To identify the exact kinds of functional ICT skills needed by the university staff for effective delivery of their tasks, an ICT training needs assessment survey was undertaken within universities in East Africa. The survey revealed the need for training courses in basic and pedagogical ICTs and consequently a training programme was developed for the identified training needs. To successfully implement the training programme, it is recommended that appropriate policies that target continuous ICT training for staff be put in place in addition to developing blended content for the modules in the training programme. Also, it is important that the training programme is disseminated and popularized amongst universities. Resources for acquisition of training infrastructure and personnel are vital as universities explore all possible ICTs, including mobile tools and technologies, in order to provide a multiplicity of learning and teaching platforms.

The Context
The use of ICTs in the different activities and processes of many universities in East Africa is not wide spread. Studies have attributed this state of affairs to a number of factors, key of which are: lack of infrastructure and limited ICT skills for the staff in these universities. Whereas the solution to lack of infrastructure is increased allocation of resources to the ICT infrastructure vote, that for limited ICT skills among staff, is putting in place programmes for continuous training in critically needed ICT skills. Consequently, a project aimed at addressing the critically needed ICTs training needs of staff in universities in East Africa was undertaken. Within this project the following activities were done: i) undertaking a staff training needs assessment survey for ICTs in universities; ii) developing ICT training programmes for academic staff based on the identified needs; and iii) piloting the training on selected university staff.

Activity Framework
To enlist ICT training needs, a survey was conducted in 30 universities from the five East African Partner States using a self-administered questionnaire, interviews, focus group discussions, documentary review and observation. Based on the identified training needs, a training programme was proposed. This training programme was validated through a workshop of 30 staff selected from participating universities.

Findings
Business Processes in Universities:
University business processes are centered on teaching, learning, research, administration, student support and outreach services. These business processes are implemented by academic, administrative and support staff and
students. For effective execution of university business processes, different ICTs are used and these require different ICT skills.

**ICT Training Needs:** There is need for training in basic and pedagogical ICT skills. Basic ICT skills training is intended to provide a foundation for use of and/or training in more specialized ICT programmes. On the other hand, pedagogical ICT training is intended to provide skills for integration of ICTs in teaching and learning.

**ICT Policies and Training:** Approximately 65% of the universities surveyed had ICT policies, but these policies were lacking in as far as deliberate regular staff training in essential ICT skills were concerned.

**ICT Infrastructure and Resources:** The majority of universities have infrastructure for basic ICT training but are in critical lack of infrastructure for aiding teaching and learning such as: bandwidth, multimedia projectors and learning management systems. Little or no financial resources are allocated specifically to ICT training.

**Motivation to Participate in Training:** There are no motivations to encourage university staff to participate in continuous ICT training programmes.

**Age Digital Divide:** Relatively young staffs are keen to participate in ICT training than their older counterparts.

**Policy Recommendations**

i. **ICT policies that target continuous training in basic and pedagogical ICT skills should be developed and implemented in universities.** This will ensure formal, sustainable and continuous ICT training.

ii. **The ICT Training Programme should be disseminated and popularized amongst member universities.** This shall enable its uptake and implementation in these universities.

iii. **Electronic and print-based content should be developed for the training programme.** This will ensure that the developed training programme is implemented in universities.

iv. **Training of university staff based on the content developed should be done.** This will increase the chances of the training programme’s adoption in member universities.

v. **Universities should set aside resources for acquiring infrastructure for ICT training e.g. Bulk bandwidth, hardware and software.** Such infrastructure could be acquired through consortia such as
vi. **Universities should explore all possible ICTs, including mobile tools and technologies, in order to provide a multiplicity of learning and teaching platforms.** This will ensure multiple and equitable access to the electronic resources developed for the training programme.

**Conclusion**

ICTs have become the modern pens that all sectors including the education sector are increasingly embracing. Continuous training in ICTs for staff in universities will enable them to harness the full potential of using ICTs. Therefore ICT training should be embraced with all the due attention it deserves.

This policy brief is based on the report of the study on “Developing Staff-Training Programmes in ICT that Address Strategic Needs of Universities in East Africa”. It was part of the MRCI Project entitled, “Enhancing the Capacity of East African Universities to Utilize ICT for Sustainable Regional Development”, being implemented by Inter-University Council for East Africa.

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