UNIVERSITY OF NAIROBI

SPEECH BY THE VICE-CHANCELLOR, PROF. PETER M. F. MBITHI, DURING THE NATIONAL ICT AND INNOVATION FOR SCHOOLS SEMINAR HELD AT KENYA SCIENCE CAMPUS, UNIVERSITY OF NAIROBI ON JUNE 25, 2015 AT 9.00 A.M.
The Cabinet Secretary, Ministry of Education Science and Technology

Principal Secretary, Ministry of Information Communications & Technology

College Principals,

Deans and Directors,

Invited Guests,

Ladies and Gentlemen
Let me take this opportunity to welcome you all to this important seminar on the subject of ICT Innovations for School. It is indeed important as we are living in a world of great technological innovations and great leaps in the use of ICT. It is also critical as the country enters the phase of implementing the Government’s agenda of providing laptops to our children in primary schools.

History of Computer Studies.

Computer studies was introduced in the secondary school curriculum as an optional subject in 1996 and later revised in 2002. Due to the dynamic nature of the subject, it has become imperative that the subject be overhauled in the planned curriculum review. Before 2002, the major problem with the first syllabus was mostly practical programming in Pascal/C because of limited human resource who could competently handle the subject as then formulated. However, it has now
been observed that the current syllabus lacks practical exposure to creativity and problem solving which come with programming.

Therefore, review of the current syllabi should emphasize more on problem solving and innovations that require more time allocation than the current 3 40-min lessons per week. But even as we proceed with review of curriculum, there is need to sensitize our youth on the broad subject of ICT and innovations.

This seminar on ICT and Innovations is therefore about changing the mindset of our youth, that they can take control of their future and explain that there are huge opportunities for them. This will help them to innovatively manage situations, information and collaborations using ICT devices; tablets, mobile phones, smart watches, Google glasses, and desktop computers- This will dramatically alter the children’s learning
experience in schools, automatically raising the quality of our graduates. Kenya has lately joined first world countries in promoting a knowledge economy. We already have global presence in mPesa, and other engineering and mobile innovations.

The other objective of this seminar is that of nurturing ICT innovations in schools. Nurturing young innovators right from Primary school to University will in the long run provide competent graduates who are able to provide hardware and software solutions locally instead of importing them from East and West. The seminar is also meant to promote and inculcate a culture of innovation, promote local research in technology, engineering and robotics. This is by providing youth with a forum for showcasing their innovations for the benefit of Kenya.
According to the government agenda in the field of ICT, Kenyan schools should be the "the Birthplace of Silicon Savannah" if Vision 2030 agenda on social, economic and political development is to become a reality. It should be aligned to Science, Technology and Innovation (ST&I) policy, the National ICT Master Plan, and global Sustainable Development Goals (SDGs).

I therefore encourage the government, universities and schools to join hands in promoting ICT and innovations through:

- Infrastructural development
- Internet Connectivity
- Financial support to innovators
- Recognition of ICT talents and Innovators
- Local hardware and software manufacturing
- Training and Mentorship
I also call upon the government to collaborate with other stakeholders (Safaricom, eMobilis, colleges and universities) and other partners to set up software incubation centers in all the counties in Kenya.

**Current ICT Implementation Challenges**

From the key players in the ICT industry, the following have been identified as the key challenges in ICT implementation:

- Human resource – lack of trained teachers
- Poor Infrastructure
- Lack of a professional body to regulate ICT like in Engineering and Law. Such a body would be responsible for setting up standards, procedures and guidelines in ICT practice for teachers and managers.
Lack of harmonized capacity building in schools, colleges and Universities which also have inadequate ICT experts to produce the desired change.

There is therefore need for more ICT teachers to be trained and employed in secondary schools. We also need to support continuous in-service for trained teachers for them to acquire ICT skills regardless of the subjects they teach. Government and other stakeholders should also mobilize resources for equipping schools with ICT infrastructure.

**Review of Computer Studies course**

It is our belief now that Computer Studies should be made a core subject like Mathematics, English and Kiswahili or core science like Physics, Biology and Chemistry considered as cluster at university level. This would entail:-
• Introduction of ICT at elementary school level.
• ICT being integrated in the syllabus in Primary and Junior Secondary, with Computer Science in upper secondary. In universities, Computer Science should be considered as a cluster subject to motivate more students to take up ICT career path right from Primary to University.
• Seamless Transition of ICT knowledge from Primary school to University like in other sciences and mathematics.
• Collaboration with other agencies and stakeholders to facilitate the integration of computer science in the curricula.

It is my earnest hope that this seminar will go a long way in addressing the challenges encountered in implementing ICT in our schools, and also providing the required recommendations on how to tackle the challenges. As a University and as a
leader in the higher education sector, we must remain at the forefront in providing solutions to the challenges affecting various fields of study as we have the necessary expertise.

Let me conclude by thanking our guests who managed to attend this seminar in spite of their busy schedules, and also the organizers for planning about the seminar. Thank you all and have a good day.

Thank you.

PROFESSOR PETER M.F. MBITHI, PhD, EBS
VICE-CHANCELLOR
&
PROFESSOR OF VETERINARY SURGERY