

## **The Role of the African Academic and the Emerging Information Society**

A number of factors have impeded our African ICT academics from playing a more vigorous role in integrating ICT into our societies. The key factors are outlined and associated solutions proposed.

### **Remuneration**

The average African academic in our universities is very poorly paid. He/She at the same time has an immediate family, which can be large, and an extended family to take care of. He/She therefore finds him/herself toiling in order to earn extra income to ensure that the associated expectations from these responsibilities are satisfied to avoid shame. This toiling often takes the form of work outside the university. Indeed, this form of moonlighting tends to take up more time than the primary job in the university.

What time is then left for one to engage actively in teaching, research and extension work? This kind of academic will:

- Spend very little time in his/her teaching duties – just enough to satisfy the minimum requirements. Consequently, the quality of teaching and learning goes down.
- Have no time for research, unless it is one where he/she increases his/her income. If he/she is paid for the research, it is likely that it serves the interests of other people, especially the “western” sponsors and that its contribution to national needs is minimal.
- Have no time to participate in University-industry collaboration (collaboration with the government is part of this), unless this kind of adventure pays well.

In other words, the basic motivation for this typical academic is financial. Other interests, e.g. participating in national debates or projects on ICT and society, are secondary.

According to me, the education sector is very crucial to national development. This importance is however not reflected in the salaries of those who educate our societies. For example, it does not make sense to pay members of parliament, judges, etc. many times more than the professor, as is the case in Kenya and probably in other countries. What are saying about the role of the professor vis-à-vis these other public servants?

## **Policy on University-Government collaboration**

Most universities do not have an active policy for collaboration with industry, and especially the public sector. It therefore becomes very difficult for institutional collaboration with the Government. What we witness in most situations are personal initiatives towards working with the Government on ICT, especially in form of consultancies.

At the same time, most of our governments do not have a policy of how they can work with HE institutions on ICT. In order for both parties to work together on ICT, there needs to be an active policy of collaboration from either side.

## **Curriculum**

The ICT curricula that I have seen in most HE institutions leave a lot to be desired. It is particularly poorly designed, does not seem to be linked to any national needs and the content does not generally hold up. One wonders who gets involved in designing such curricula. In particular, most curricula does not seem to have benefited from discussion by experts in ICT and other stakeholders who consume the products (graduates) of these HE institutions. Although most countries may have regulators in HE, these regulators tend to lack the expertise to be able to assess the value of the curricula. In Kenya, our regulator hires expertise from Universities. However, the remuneration rate for such expertise is so low that it does not attract the right kind of persons.

Poor curricula means that our HE institutions are producing poorly trained ICT professionals. What then do we do to address this problem? One of the ways is to for HE institutions to have a system of curriculum development that engages the best mix of academics in ICT, whether these are within the institution or outside and that subjects the curriculum to potential employers of the graduates to ensure relevance.

## **Human resources**

Most of our HE institutions do not have highly qualified lecturers in ICT. How many universities are offering a Bachelors degree in computer science and do not have a single Ph.D. holder in their staffing? I have seen a number of them. Even worse, I have seen universities that offer a Masters degree in informatics or computer science and rely heavily or solely on Masters degree holders for lecturers! The result again is poorly trained graduates.

Perhaps we need regional centers of excellence established in some of our universities for postgraduate training in most key areas of ICT, especially in computer science and informatics as a way of addressing this problem.

### **ICT facilities**

Another factor that contributes to poorly trained ICT professionals is poor or lack of adequate ICT facilities. I have come across universities where students taking computer science courses have graduated without using a computer! Of course this is an extreme case. The fact of the matter is that ICT facilities available for students pursuing ICT programmes are an issue in most of our HE institutions. One of the reasons is lack of funding for ICT in most institutions. Even when computer fees is levied, there often lacks a strong institutional structure and system to ensure this form of funding is utilized to equip student laboratories with ICT facilities.

What then do we do with this perennial problem? I strongly believe that levying computer or ICT fees to our students is a sustainable way of funding ICT in our institutions. However, this has to be matched with a strong ICT function in charge of planning, development, implementation and support of ICT to support the training of ICT graduates. This function should also lead in the integration of ICT into teaching and research in general.

### **Leadership in universities and in Government**

Most of our HE institutions and governments lack leadership that recognizes the role of ICT in our societal development. Little wonder then the following is often the case in many of our countries:

- HE institutions are not producing the quality, quantity or mix of ICT graduates who will spur the development of the ICT sector in our countries.
- most countries either do not have or have a fragmented national ICT policy and strategy framework.

The kind of leadership required at both national level and at our HE institutions in order for ICT to play a more critical role in the development of our societies is an issue that we must focus on during the visioning workshop. Also to be discussed is our role in helping to create the required leadership.

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