

ICTs AND THE ATTAINMENT OF UNIVERSAL ACCESS TO EDUCATION: AN ADDRESS BY THE EXECUTIVE SECRETARY UBEC, DR AHMED MODDIBO MOHAMMED, ON THE OCCASION OF THE 1ST PUBLIC SECTOR ICT INFRASTRUCTURE FORUM MEETING, HELD ON WEDNESDAY, JULY 2ND, 2008

- Protocols

INTRODUCTION

I am delighted to be in your midst and feel honoured to present an address to this very distinguished gathering on the occasion of ‘1st Public Sector ICT Infrastructure Forum. This meeting is a very important one considering the position of ICT in the education component of the government’s 7-point agenda. This session is very important, since it will generate ideas for the Country to have a total digital coverage and strengthen the Country’s resolution to realize its dream of using e-learning for education delivery at all levels. This will further ensure the attainment and sustenance of education reforms in the Country. The greatest achievement in the 20th century was the development and the application of information and Communication Technology (ICT) to all facets of human Endeavour. Today, there is an unprecedented surge of information in the world.

The need for Nigeria to find its place in this information age cannot be further suspended. If Nigeria must wait for all necessary pre-conditions including infrastructure to be met before we find our place

in the ICT revolution, we will be left behind once again. Therefore, we must strategise to find a way of plugging into the global train.

Currently, the basic education sub-sector is lacking in every basic infrastructure and the temptation is to focus on these other infrastructure (classrooms, furniture, textbooks, quality teachers, toilets, etc) before paying serious attention to ICT development. The need for ICT in the basic education service delivery is even more pronounced now because, in addition to its application to effective administration, it is also known to be used as the tool for e-learning and even more recently, classroom lessons delivery by teachers at all levels of education in some parts of the world.

STATE OF ICT IN NIGERIA

In the last few years, there has been a remarkable improvement in the provision of ICT infrastructure in the country. The Government's liberalization policy in the ICT sector has provided the needed drive to reposition the nation in the global ICT world. Main areas of interest include Internet Connectivity and telephone lines. Government has taken bold steps to make necessary policy and initiatives that would facilitate the Country's emergence as an information and communication Technology giant.

Recent efforts by government towards ICT development in Nigeria include:

- ❖ Launching of the National Telecommunication Policy

- ❖ Development of a comprehensive Science and Technology Policy
- ❖ Development and launching of the National Policy on Biotechnology
- ❖ Development and launching of the National Information Technology Policy
- ❖ Establishment of National Information Development Agency (NITDA)
- ❖ Launching of the Nigerian Satellite Systems Programme by the National Space Research and Development Agency(NASRDA)
- ❖ Development of the National Information Infrastructure Backbone (NIIB)
- ❖ Development and launching of the Mobile Internet Units which are buses equipped with computer systems and other accessories with a VSAT for Internet
- ❖ Establishment of Rural Internet Resource Centers (RIRC) with the collaboration of international organizations in the six geopolitical zones of the country, to provide for training and provide access to link up with the rest of the world
- ❖ Development of CISCO Regional Academy by NITDA which is setting up local academies in some higher institutions in the country. These are to train Network administrators and impart knowledge and Network technology; and most recently
- ❖ Finalization of Nigeria's Vision 2020 Information and Communication Technology for Development (ICT4D) plan by

NITDA. This is targeted at using ICTs to achieve the 7-point agenda and Vision 2020 initiatives of the Federal Government as well as the Millennium Development Goals and the new partnership for Africa's Development initiatives. (*The Punch*, 30th June, 2008).

ROLE OF ICT IN BASIC EDUCATION

The critical issues in basic education have been Access, Equity, Quality and Management. The appropriate development of ICT will accelerate the attainment of full access. Access can be enhanced because it is not that you can physically build schools in every village before you can have access to information. Rather even in homes, there can be exchange of information between teacher and pupil through ICT facilities. Likewise for equity, the information being passed to the urban schools will be same as information reaching the rural schools through the full implementation of school mapping and micro planning. Quality can be maintained uniformly through ICT thus overcoming the limitations of locations, terrains etc.

As for the management and governance of basic education, ICT plays a major role in data collection and analysis for effective planning, budgeting and administration. This is in addition to the positive roles of ICT in cross-cutting issues such as HIV awareness, advocacy, Community sensitization/participation, partnerships. Again, the fact that the same quality of information can reach the

same location, means reducing the dividing line between the 'in-school' and 'out-of-school' learners.

Thus cost of education in terms of delivery is considerably reduced. For example, one excellent teacher can be made to teach a number of children at the same time rather than scouting for the equivalent number of such teachers. Teacher capacity is also enhanced. The entire workforce needed to educate the populace will be reduced and deployed to other sectors of the economy. This will create a multiplier effect.

ICT helps to expand people's access to knowledge through education. Information Technology can be described as the integration of computer technology, mainly in the form of internet and information management systems. It gives users the opportunities to handle text and images, numbers and graphs, instructions and music and to process information by organizing and re-organizing, sorting and analyzing, presenting and communicating. In order to attain these skills, there is need for users to be computer literate. Hence the Federal Government incorporated computer education as one of the subjects to be offered at all levels of our educational system.

The National Policy on computer education stipulates the various objectives to be obtained at these levels. At the primary level, the objectives are to enable the pupils to:

- a) Use the computer and thereby acquire basic skills such as using the keyboard, accessing and editing file at the operating system level.
- b) Use the computer to facilitate learning; and
- c) Develop rudimentary skills in the use of computer for text writing, computation and data entry activities (NERDC 2002).

The uses of ICT in education, according to Liver pool (2002), include ICT as object, ICT as an assisting tool, ICT as medium of teaching and learning and ICT as a tool for organization and management in schools. ICT as object refers to learning about ICT. It is mostly organized in specific courses. What is learnt depends on the type of education and level of the student.

ICT can be used as a tool to support teaching both in content and methodology. It can be used while marking assignments, collecting data, documentation, conducting research and communicating.

ICT serves as medium through which teachers can teach and learners can learn. It can be in form of drills, simulations, practice, exercises and educational networks. ICT can be used in handling school records like time tabling, attendance, fee collection, examination results and general communication which is commonly referred as to database management.

FME/UBEC INTERVENTIONS FOR UNIVERSAL ACCESS

The Federal Ministry of Education (FME) has put in place a Policy on National Education Management Information System (NEMIS). In addition, computer education curriculum for all levels of basic education have been developed, launched and distributed to schools. FME has ensured the deployment of VSAT in Unity schools nationwide. FME has encouraged private initiative in the implementation of one computer per child in some basic education schools. FME has further made computer/ICT studies to be one of the core and compulsory subjects in basic education.

Government has expanded access in tertiary education through the use of ICT, the National Open University of Nigeria (NOUN) programme attests to this. Similarly, it is also considering using the same strategy to expand access in basic education through open schooling which has become a permanent feature of education in places such as Indian, Pakistan and Bangladesh.

The Universal Basic Education Commission, in her contribution towards achieving the Federal Government objectives in ICT enhanced service delivery, is presently working towards the general upgrading of its ICT equipments, which includes VSAT, Desktop Computers, Laptop computers and other accessories.

There is a Policy guideline on minimum standard of EMIS as a beginning of UBEC's determination and preparedness to employ all

possible resources and mechanisms towards attaining the mandate of providing unhindered access to quality education by all school aged children.

Indeed, the task of setting standards for quality basic education delivery and monitoring same revolves around our ability to establish a sustainable Education Management Information System (EMIS) through which our efforts, challenges and successes can be practically accessed. Already, the Commission has in place an established database which consists of pupil/student enrolment, attendance, teacher qualification, classrooms, condition survey of schools etc. With full deployment of ICT, each of these can be accessed and updated online thereby providing quick and prompt information to fasten decision-making.

We are therefore in the process of expanding our technical capabilities, extend our reach as well as create a unified ICT-based platform for communication with all basic education stakeholders. This is to entrench within the basic education structure a flexible and robust Education Management Information System that would facilitate the attainment of UBE goals as well as other socio-economic agenda of Government.

A solid and functional EMIS for SUBEBs shall generate data leading to identification of achievements and gaps and policies to ensure proper implementation of basic education.

Furthermore, we have been providing technical assistance to SUBEBs in ensuring their compliance with the EMIS minimum standard policy. It is my hope that, in the very near future, issues of capturing a child's biometric data at the entry point will be achieved.

While I fully support your plans to deploy VSATs to all 774 LGAs and 5,000 additional points in the rural areas, may I suggest that the annual subscription should be made as minimal as possible so that the LGEAs and schools at basic education level can take advantage of it.

CHALLENGES AND THE WAY FORWARD

For the basic education sub-sector, the immediate challenge is the rapid training of teachers on the use of the 9-year basic education curriculum which includes computer/ICT studies as one of the compulsory core subjects.

Ladies and Gentlemen, the major problem in our country, however, is the non-implementation of well designed policies, plans and programmes. If the implementation of ICT development is to be a success, we must be determined to implement all the ideas that will be generated at this forum.

Very small countries like Lesotho, Swaziland etc., have elaborate policies on ICT that are being meticulously implemented. Here in

Nigeria, all stakeholders will need to work together to ensure the full implementation of the ICT policy for the country. This will include: building capacities, increasing confidence & security in the use of ICT, creating legal & regulatory environment as well as encouraging cooperation. Specifically, Government will need to continue to provide the vision, policy and adequate resources to invest in supporting infrastructure for ICT in partnership with the private sector & development partners.

There will be the need for a specific regulator who shall monitor market supply and capacity of service providers and then intervene appropriately.

The civil society will be involved in sensitizing the public regarding the full potentials of Information and Communication Technology.

There is the need for more positive attitude by relevant policy makers on the establishment and maintenance of ICT development.

Government has expanded access in the tertiary education. Similarly, it is also considering using the same strategy to expand access in basic education through Open Schooling which has become a permanent feature in education in countries such as India, Pakistan and Bangladesh.

For the sake of sustainability, Government should see itself as playing the role of Catalyst while encouraging private sector participation. At the inception of the project, serious thoughts should also be given to alternative means or source of power e.g. Solar energy, Inverters etc.

Conclusion

If, at the end of this forum, stakeholders are adequately sensitized to play specific roles in the implementation of Information and Communication Technology development, the roll-out of National Information Communication and Education Project (NICEP) will register better success.

I thank you all for listening.

Dr. Ahmed Modibbo Mohammed

Executive Secretary, UBEC - Abuja.

July 2nd, 2007

REFERENCES

ICT Policy For Lesotho Final 4 March 2005:
www.lesotho.gov.is/documents/lesotho_ict_policy_final.pdf

Liverpool L.S.O.

Information and Communication Technology in Teacher Education. A paper presented at Teachers Summit, 25th Anniversary Celebrations of National Teachers Institute Kaduna: February 2002.

Mohammed A.M. and Ekpunobi E. N. (2003)

The Role of Information and Communication Technology (ICT) in Teacher Education. Proceedings of the 44th Annual Conference of the Science Teachers Association of Nigeria.

The National Computer Education Curriculum for Primary School. NERDC 2002

The National Policy on Education. 2004

The Punch Newspapers. June 30, 2008 (Page 45)