

TECHNOLOGY

Kenya takes steps to adopt e-learning

Experts say method would reduce cost of education, address shortage of teachers in schools and improve results

By PETER NGARE

Kenya is trying to catch up with other countries in the use of digital technology to boost learning.

In developed countries, digital technology has been integrated into education systems and has become a key teaching tool in schools.

The method, otherwise known as e-learning, involves the use of internet technology to promote efficiency in delivery of curriculum content and improving student performance.

It is all about the convergence of internet and learning.

Last week, representatives from Africa and development partners congregated in Nairobi to review progress in implementation of e-learning programme in various countries and debate challenges facing the scheme.

During the second Africa e-learning Conference that attracted 1402 participants from 88 countries, it emerged that electronic learning was expensive and a complex undertaking for Africa but it was inevitable.

The method will mark a radical shift from the traditional teacher-driven learning.

Kenya has taken baby steps towards the integration of digital technology in learning.

Pilot project

Under the New Partnership for Africa's Development (Nepad) initiative, Kenya launched a pilot project in six schools where students use computers for learning.

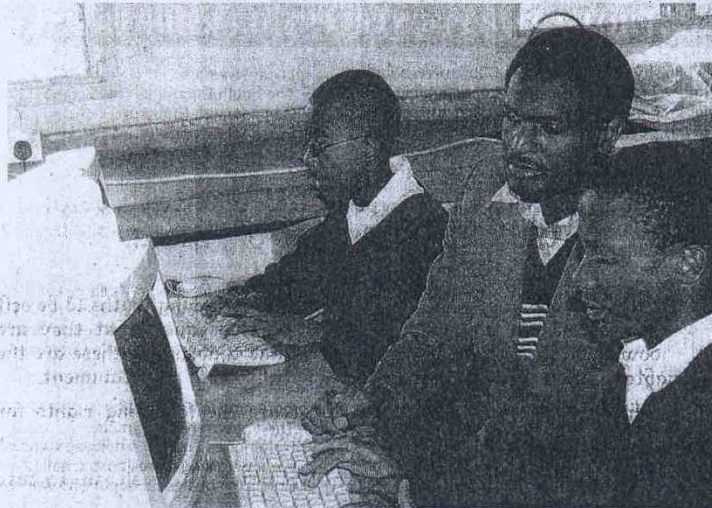
The project was started at Isiolo Girls Secondary and was replicated in Wajir Girls, Menengai Mixed, Maranda Boys, Mumbi Girls and Chavakali Boys secondary schools.

Delegates at the Nairobi conference, who included education ministers, agreed that if fully utilised, technology can reduce the cost of education and boost efficiency.

According to Education minister George Saitoti, a shift from the traditional teaching method to e-learning would address the problem of access to education.

Currently, the transition rate from primary to secondary stands at 60 per cent while at the university, just about 30 per cent of those who qualify for admission secure places in the country.

The minister also appreciates that even



with the introduction of the much-hyped Free Primary Education, over a million children are still locked out of school. This, according to Prof Saitoti, can be attributed to the conventional methods of teaching and learning.

African countries need resources to expand institutions and provide staff and instructional materials such as textbooks in order to increase access to education.

Most delegates at the e-learning conference talked of the digital technology as the cheaper and appropriate alternative.

According to Ghanaian deputy Education minister Kwame Amporfo Twumasi, the place and pace of e-learning is not rigidly defined, thus allowing students who are out of school to learn while they engage in other activities.

The experts also praise the method as not restrictive to age as is the case with formal schooling.

The computer learning is also viewed as being relatively cheap and cost-effective especially in terms of manpower as one teacher can reach many learners through internet, video conferencing and interactive white board technologies.

Ms Anju Singh of Smart Technologies cited a project implemented in South Africa as a clear pointer to the advantages e-learning.

"E-learning involves application of different technologies such as interactive

white board, video conferencing, virtual classrooms among others. For example in South Africa we have a project where schools that are 15 kilometres apart have only one maths teacher," she said.

Some of these technologies will involve discussion between teachers and students who are far from each other.

Such technologies also ensure provision of quality education.

Ms Singh says the technology would address shortage of teachers especially in mathematics and sciences.

Parents will be spared the burden of buying textbooks because most of them would be available on the internet.

Replace textbooks

Ms Maria Levy of Eduvision, a Swiss computer company, says new software is being developed to replace textbooks.

"We are developing software to digitise textbooks. Students will have access to a virtual library with over 15 million textbooks."

The quality of education, say the experts, would also be enhanced under e-learning because the method will focus on creativity and innovation compared to the current one that revolves around performance in examinations.

"ICT is a tool to explore new ideas and promote continuous learning. The content is interesting and engaging," said an expert.

But there are major challenges.

The Government has already come up with the Education National ICT strategy to ensure Kenya prepares the youth for competitive and knowledge-driven global economy.

However, more should be done to turn policies and strategies into learning

A teacher and students during a lesson in a computer lab. There is fear that teachers may lose their jobs to digital learning.
Photo/FILE



Prof Saitoti

experiences. First, parties to involved in implementation of the programme must be trained in information technology.

Majority of Kenya's 235,000 plus teachers are computer illiterate and therefore cannot effectively implement the e-learning scheme.

There is also fear that e-learning may lead to loss of jobs.

But experts clarified that teachers will still be relevant especially in mathematics and the other science subjects.

Secondly, most Kenyan schools have no access to electricity, internet connectivity and cost of computers is still high.

National grid

Says Prof Saitoti: "In Kenya, up to 80 per cent of the primary schools and 35 per cent of secondary schools are, currently not connected to national electricity grid. Over 95 per cent of the primary schools and more than half of secondary schools do not have computer laboratories."

The question of electricity, says the minister, is being addressed under the ongoing rural electrification programme.

"Once completed, this will enable schools to get electricity, which is required to power computers for e-learning."

In addition, the spread and availability of ICT services across the country is far

6

Number of schools involved in Nepad pilot project

from satisfactory.

Today, 56 per cent of the fixed telecommunication network is concentrated in Nairobi. This has contributed greatly to the digital divide between urban and rural areas and the rich versus the poor.

The Government hopes that the completion of the East African Submarine Cable Systems (EASSY) will be of great help.

Equip schools

"We expect that internet cost will be cheaper and affordable to the public and very beneficial for enhancement of e-learning in all our educational institutions," said Prof Saitoti.

Although, according to the minister, the actualisation of e-learning could be about 10 years away, efforts are also being made to equip schools with computers in readiness for the digital technology.

According to Mr Andrew Limo, a senior information officer with the Directorate of e-Government at the Office of the President, the cost of maintenance and internet connectivity should be reduced for the programme to succeed.

And there must be safeguards to ensure learners do not abuse the method by accessing inappropriate material such as pornography.