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Editorial: ICTs for the quality of education and socio-economic development

The fourth newsletter of the PanAf project appears within a context when Africa is increasingly aware of the need to master information and communication technologies (ICTs), not only to improve the quality of education but also to promote the socioeconomic development of the continent. There are many people who agree today that research and education are at the centre of economic and social development and are prerequisites to technological development. In return, the mastery of ICTs could contribute to the improvement of the quality of education. From that moment, integrating ICTs to education becomes a privileged means likely to encourage the emergence of a high level technological socioeconomic sector. Thus, assistance to research, training and international cooperation for the mastery of ICTs become potentially hopeful solutions. It is from this angle that we could situate the PanAf project and the research being conducted in schools across several African countries the results of which are presented here by some articles.

This issue appears in a context of fancy for ICTs and interesting practices are initiated by many countries with support from development partners. Many countries are seen today being endowed with policies that integrate ICTs and Ministries are devoted to the development of ICTs. However, things should not always be left to come up on their own, advocacies should be carried out with those in power and awareness actions undertaken with educators, students and their parents as well as the civil society. These are ways that attempt to break up with the use of ICTs in Africa which are considered as sporadic and without a clear direction.

This issue proposes experiences, thoughts and ideas that you would explore based on the goals that you pursue in your teaching and research practices on the integration of ICTs. The angles adopted by authors of the articles in this newsletter to address the integration of ICTs are many and various.



Dr. Abdoulaye Barry, Member of PanAf Scientific Committee

Some show us how ICTs provide changes, not to say upheavals, in relation to knowledge and student-teacher relations. They uphold that the integration of ICTs in educational practice gives more liveliness to interactions between students and their teachers. If ICTs enable students to explore by themselves new research avenues

and new knowledge, teachers find themselves in new roles as guides and organizers. An experience in the development of multimedia contents through the curriculum of teachers' training comes to justify the use of local materials for teaching and learning.

Other articles treat obstacles to the integration of ICTs in teaching practices. If the authors do not fail to include issues such as equipment, software and connectivity, they underline the low level of techno-pedagogic skills of teachers, the absence of an appropriate introductory strategy of ICTs in schools as well as the absence or the paradoxical nature of policies which govern their integration. The training of teachers and educators henceforth becomes a critical link to the integration of ICTs in education. However, actions within the school should be guided by the place and meaning given to ICTs in the school curriculum, by school and partnership projects that the schools establish with the private sector, CSOs and NGOs.

Some authors address issues of equity and ethics linked to ICTs. According to them, the integration of ICTs in schools should be done by contributing to the improvement of teaching in disadvantaged schools. Indeed, technological disparities between schools are marked by the socioeconomic differences in their areas of establishment. The integration of ICTs in schools

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in disadvantaged environments will contribute definitely to increasing the rise in the social level of the communities served. On the issue of ethics, the authors insist that it is important to build attitudes and competences in students who respect ethical aspects such as the fight against plagiarism.

The issue of motivation of learners and the recognition of technological skills acquired is also treated in this issue. An article points out that it is important that skills acquired by students on ICTs be recognised and certified. This certification which, in addition to attesting that the level of mastery of ICTs by the student constitutes a motivational factor for his use in learning thus encouraging the development of technologies in the education sector.

In this issue, we also discuss the problem of reconciliation of universal scientific growth with local specificities through local languages. One author points out the divorce between the languages used by a majority of the populations served by the schools and that which serves in the teaching and use of ICTs in school. He highlights the challenge, most certainly difficult to be overcome, of creating a “*ticelological*” vocabulary in national languages.

Articles presented in this issue are intended both for educational authorities, teachers, researchers and students as well as social part-

ners and technical and financial partners. Every reader will find, according to their interest, information likely to generate other thoughts, inspire actions, bring into focus policy and management provisions which should be taken and implemented for the use of ICTs to be a reality and that they should provide the expected beneficial effects in the development of education and the socioeconomic system.

Happy reading!

*Abdoulaye Barry,
Member of the PanAf Scientific Committee*

Accessibility of ICTs to learners in South Africa: a comparison of poor and rich schools



*Nokulunga Sithabile
Ndlovu*

Access to ICTs in South Africa is not just an educational matter, but one that government hopes could be instrumental in achieving equity in communities. Thus, state initiatives have attempted, through provincial governments, to bridge the digital divide in order to help develop the country's economic and human resource capacity to compete globally. However, differences in the economic status of our schools have further stretched the gap.

Our PanAf research team has some concerns, arising from our data, that question the credibility of the government's efforts. Learners in elite schools, for instance, are able to utilize computers and other modern technologies effectively. They are taught by subject specialists using innovative pedagogic methods to integrate ICT and are able to extend this outside the classroom through online communication in their homes. Information and technol-

ogy lessons provide exposure to the latest software that keeps them in touch with modern technological trends in first world countries. There is no doubt that access to technology provides these learners with enriched learning opportunities that prepare them for effortless adjustments to the requisites of meaningful occupations.

It is evident from the above that the South African government's vision of accomplishing an economically developed society by giving school children access to ICTs is plausible. One therefore needs to consider all the factors that contribute to the success story to try to reproduce this in all schools. To bring these to light, I will examine mechanisms that Gauteng Province, through its Gauteng OnLine (GoL) project, has used to attempt to increase access in its poorer schools.

1100 public schools in this province each refurbished a classroom to accommodate 24 networked computers for learners. To secure the equipment, schools had to ensure the classrooms fulfilled minimum safety requirements and send their teachers for training to acquire basic computer skills. However, our research indicates that, of the six schools that benefitted from this project, only four of them give learners access to computers. Although there is a computer teacher in each, only instrumental skills are imparted. Most learners in these schools are only in contact with a computer for 30 minutes once a week. There are few schools that have risen above the barriers and introduced other ICTs such as radios, televisions and DVD players. The Internet is rarely connected at most of these schools and less than 10% of teachers integrate ICT into their teaching. Two of the schools have fully fledged computer labs that are not in use - one simply uses it as a normal classroom, lack of management interest is the hindrance in the other.

Learners in these schools have not been taught or given time to apply skills to create opportunities for themselves that would transform their lives towards higher occupations in the society. In ICT, as elsewhere, economic background definitively contributes to poor children's exclusion from quality skills that the job market needs. In rich schools, and in a broader network extending into the

homes of these students, there is an abundance of such resources and skills. Learners can gain access to information and communication is open any time of the day, naturally providing more development of mental resources. Time to develop practical skills operating ICTs, searching for information and applying these to solve social and economic problems translates directly into the development of higher-order thinking skills.

It is apparent that accessibility of ICT is not only a matter of availability of physical resources in our schools but a social issue that cannot be eradicated as long as certain structures that promote divisions still exist. Although our government seeks to combat past inequalities by supporting disadvantaged schools, its attempts have a long way to go to match the level of accessibility that rich learners enjoy in their schools and homes.

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University of the Witwatersrand, Johannesburg

“It is apparent that accessibility of ICT is not only a matter of availability of physical resources in our schools but a social issue that cannot be eradicated as long as certain structures that promote divisions still exist.”

Plagiarism and the Internet: a point for debate

The South African PanAf data has thrown up an interesting set of issues regarding the impact of Internet access and usage by students and school learners. In general, schools indicate that one of the perceived benefits of using ICTs in learning is the ability to conduct research by surfing the Net. However, is this a good thing? Language teachers at one of our schools – it has been in the top 5 performers in the local Matriculation examinations for the past 20 years! – expressed strong opposition to the use of ICTs on the grounds that it encourages rampant plagiarism. The tendency is for learners, when they do projects, to cut and paste text from all over the place on the Web, to cobble it together in on the basis of apparent common words or other links, and to pass it off as their own writing. This is often called *patch writing* – “writing that uses sections of verbatim copied text from a variety of sources, linked together with additional sentences”.

At the teacher training institution that we have researched, there is also concern amongst faculty about the plagiarism that is made so easy by the Internet. The problem seems to be that informa-

tion is usually presented and pursued on the Internet as if it is flat, without depth or structure. The systematic engagement with texts over time (coming back to the same points over and over again to develop depth in understanding) that is the hallmark of good scholarship seems to run counter to the constant horizontal links that are encouraged in a hyper-linked learning environment. And so learning on the Internet becomes the constant linking of bits and pieces of information to each other, at face value, as they jump out at you upon the random clicking of this or that hyperlink button. The writing strategy of choice becomes a version of plagiarism! The strong argument is that it is only after having acquired the depth of knowledge that traditional academic study makes possible that the Internet can become a powerful tool for research and scholarship. To encourage its use in the course of initial studies in higher education is to undermine the ability of students to develop their own knowledge in a deep, critical way. It reduces knowledge to information.

But is the Internet, and even the kind of plagia-



Ian Moll

“Language teachers at one of our schools expressed strong opposition to the use of ICTs on the grounds that it encourages rampant plagiarism.”

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rism that it encourages, necessarily such an enemy of academic learning and development? One of the things that a learner in senior secondary school and in university must do is to learn to write texts that develop arguments that reflect the nuances of debate in a field, that remain within and develop the canons of a discipline, and yet that take a personal position as a writer. This is enormously difficult to do, particularly in situations where learners have not for some reason or another learned to think and write critically in their previous education. We are coming to the view that *patch writing*, provided that it does not present itself

as the ultimate in academic writing, is an important developmental process for young students learning to write in an academic environment for the first time. And hence, that the Internet is an important tool in training students to think and write in a University context.

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The ‘new’ Digital Divide in Education

During the early days of ICT (Information and Computer Technology) people often made reference to information rich and information poor countries or more commonly the term ‘information haves and information have nots’ (Gudmundsdottir, 2005, p 1). ‘As the use of computers and the Internet developed and escalated, more and more people started using the concept ‘digital divide’ as a term describing the enormous divide between those who have access to technology and computers and those who don’t.’ (Compaine, 2001; Monroe, 2004; Norris, 2001; Warschauer, 2004). ‘In Africa as a whole only 2.7 % of the population has access to the Internet but in South Africa around 10 % of the population has access this means around 5 million users out of a population of 48 million.’(Gudmundsdottir,2005, p 4).

One of the most unfortunate by-products of the digital divide is its negative impact on educational efforts throughout the developing world. ‘Digital technologies provide exciting new opportunities for students in the industrialized world to obtain large amounts of current information on almost any topic, to communicate their thoughts in dynamic new ways, and to work more efficiently than ever before possible. Without access to the benefits of ICT, students in less developed countries may fall even further behind their peers in other nations’ (Williams, 2001, p 5).

‘In 2000, only 24.4 % of south African schools had access to computers which were used for purposes other than for school administration and 35.5 % of schools had no access to any form of telecommunications so few schools were able to offer their learners access to the Internet.’ (Information and Communication Technologies in South African Secondary Schools, HSRC, Howie, S.; Muller, A.; Paterson, A.; 2005)

The government realized that it was important to address and fight the digital divide in order to bring the country into the new ‘informational global economy’ so released two white papers, the white paper on Education and Training (DoE, 1995) which focused on ‘outcomes based education, developing problem solving skills, and providing a creative environment in which new technologies are harnessed to produce knowledge products’ and the white paper on Science and Technology (DACST, 1996), which stressed that access to ICT is crucial to ‘national competitiveness and popular empowerment’ and proposes ‘a National System of Innovation that will support and promote the attainment of national objectives by the creative use of the outputs of the science and technology system with regard to new knowledge and new technologies.’ Strategy for Information and Communication Technology in Education (DoE & DoC, 2001).

Government sought collaboration from business to solve some of these issues and in 2001 Gauteng Online was set up in collaboration with a few large businesses, to provide over 2000 schools with access to computers and the Internet in Gauteng, focusing mainly on schools that could not raise the funds to install their own computer centers. The installation of these computer centers would be rolled out in phases starting with the installation of computer centers in fifty pilot schools in 2001, to address the issue of providing material access to ICT.

However despite the huge efforts on the part of government to provide material access to com-

puters and technology, '....studies now show that the focus has moved from the material access to computers and technology to the skills and opportunities one has to possess to use the tool.'(Gudmundsdottir, 2005, p 2) 'Just like having access to books doesn't mean you are able to read them, not to mention use their content to your own benefit. The same can be seen as relevant for computer and Internet use, just having access does not guarantee the ability to use or make use of the technology.' (Gudmundsdottir, 2005, p 2).

There can be no divide without the digital. 'The latest approach to the digital divide is to look beyond the issue of material access to the equally important 'skills to use the technology, the motivation to use the new technology and the ability to use ICT to your own benefit.' Gudmundsdottir, 2005, p 5). Van Dijk(1999) declares the 'new divide' as a problem of mental and material access versus the skills to use the tool.(Norris, 2001;van Dijk, 1999; van Dijk & Hacker, 2003) van Dijk and Hacker(2003), Warschauer(2004) and the Bridges group show three different approaches to the digital divide, each one of which goes beyond the issue of material access to show the new issues of access which make the digital divide a complex phenomenon.

Van Dijk recognizes four different kinds of barriers which limit the ability to use ICT for maximum benefit. These are mental access which may include lack of motivation to use the new technology as well as anxiety about using computers and new technology. Material access describes the possession of computers and Internet connection. Usage access closely related to material access refers to the amount of opportunities one has to access the technology. Skills access refers to inadequate education and training which may limit the ability to use the new technology. (van Dijk, 1999). Warshauer (2004) approaches the digital divide in terms of four divides based on physical resources, digital resources, human resources and social resources. Physical resources mean access to computers and connectivity to the Internet. Digital resources refer to how the content and language of the technology may limit use and human resources look at how literacy and education levels could be a barrier to benefiting from the technology. Finally social resources look at how communities and institutions are dedicated to introducing widespread computer use and to ensure that people are not limited in their use of technology based on gender, race, or other socio-cultural factors. 'Linked to social resources is the government's willingness in providing what is needed 'to enable the integration of technology throughout society'. (Bridges group)

Studies are also now being conducted on the many new divides which have developed within the huge divide of material access, these being the rural/urban divide which looks at the differences in access to computers and technology for those living in rural areas and those living in the city. The generational divide, the access and skills to use that various generations possess. The gender divide which looks at the difference in access and opportunities between the sexes and the educational level divide which addresses how different educational levels of learners may be limiting in terms of learning 'skills to use'. The diverse cultural and ethnic backgrounds of the people in South Africa, which is reflected in the many mother tongues that are spoken and language use of students, make it interesting in terms of the digital divide. 'In South Africa, English is the most common language of teaching and learning from Grd 4 and this despite the fact that only 9% of the total population have English as a mother tongue.'(Holmarsdottir, 2005; Silva, 2006).

In a recent investigation of seven schools that were recipients of the Gauteng online project, all had computer centers, hardware and software but had had no Internet connectivity since 2006. One school lacked access to electricity. There was also not a sufficient period time for learners to practice skills learnt either in computer literacy classes or as part of collaborative teaching. Most learners were very keen and enthusiastic about using the technology and there was a high degree skills exchange so the mental divide for learners was not apparent in the research participants I engaged with. Many teachers, however, experienced mental access issues and as a consequence were reluctant to integrate new technology into their learning areas and to engage in collaborative teaching thus limiting the usage access of the resource. The 'skills to use' is mainly affected by literacy levels of learners who have not yet mastered English. Only one school allowed the broader community to use their resources the others seeing security and lack of staff as inhibitors to community usage.

In order for these divides to be addressed and bridged: first, basic services have to be provided for, for example electricity. A firm ongoing agreement needs to be established between government, NGOs and business to provide material access that is sufficient. Issues of language and literacy will have to be addressed by creating entry level programmes and training manuals in a range of official languages. Further sustained teacher training and development needs to be undertaken if collaborative teaching is to become common place and ways to share the resources with the wider community needs to be established.



Equally important to address the new digital divide are the skills to use technology as well as usage access and mental access. A lot more attention needs to be given to training teachers to work with technology so that they can take advantage of its potential and apply it in collaborative teaching. The different languages that are spoken and the literacy levels of learners can serve as a major barrier to taking advantage of ICT resources. Basic entry programmes and training manuals should be translated into a range of official languages.

To enhance the role of ICT in developing education systems, the initial emphasis should probably be on higher education and secondary schools, since these institutions will be directly involved in training the ICT specialists of the future. Teachers need to be made more aware of ICT's potential, and dynamic teachers need to take leadership roles in helping their colleagues work with technology.

Any ICT policies in future need to aim to develop basic technology skills throughout the entire school-aged population as well as the wider community and ways to share resources with the community need to be developed if all are to benefit from ICT and social and political inclusion.

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Samuel Mawete

Need to integrate ICTs in the initial training of teachers in Congolese schools

One can affirm that the vocational training of teachers in Congo amounts, to say the least, to a relatively technocratic vision of teaching, that is to say, that which is limited to both the didactic and pedagogic mastery of a certain quantity of skills namely: teaching, designing exercises, marking scripts, pondering on the relevance of sanctions and use of discipline, in a word, knowing how to manage a class.

Whereas, as we know, the initial training of a teacher is a significant factor in the building of his personal identity. When, for instance, the expectations of his pupils (or students) are no longer satisfied, when the desires and expectations of beneficiaries and the performances of the latter no longer correspond to those of the society, there is a good reason to question not only the pedagogic and vocational training received but also its desire to improve its educational practice through further training, especially on information and communication technologies.

Indeed, a vocational training policy that integrates ICTs inevitably leads to the design of a training which does not confine the individual and which does not alienate him. On the contrary, it gives the teacher the assets necessary to profitably carry on his future occupation. It also tends to lead everyone to finding a link between the reality of his occupation, the imaginary and the project.

Today in Congo, the noble occupation of teaching no longer has the intellectual and moral value of long ago. The teacher who enjoyed some fame within the society is nowadays discredited and everybody disapproves of him because of his behaviour and by the absence of either the mastery of his

skills or the pedagogic use of ICTs.

The current training of our teachers (from nursery to university), poses the problem of the quality of initial training, on the one hand, and that of the duration and training contents on the other. In a nutshell, since initial training is often problematic, it does not enable many teachers to have a position of reflexivity nor a critical thought towards previous knowledge and their own praxis, for lack of further training. Vocational training designed as ready *once and for all for employment* is far from being truly considered as academic, because, specifically, epistemological decline on learning and research is not integrated in training, for lack of a pedagogic integration of ICTs.

- A vocational training thus designed is not fit to be adapted to the social and technological evolution, to the current changes of our society and to the new challenge which the Congolese society is facing, that of pedagogic integration of ICTs.
- This challenge cannot be addressed without an in-depth reform of programme contents, teacher training methods and without a rational and scientific production of new forms and practices in education, in a nutshell, without a pedagogic integration of ICTs in the vocational training of our teachers.
- The pedagogic integration of ICTs is an improvement factor of the teaching condition and its further training and a necessity to save the Congolese school.

It is on this account that it becomes urgent to set up an incentive and motivational system of teachers through initial and further training which integrates ICTs, the easy career promotion, conducive working conditions (infrastructure, furniture, textbooks, didactic materials, computer equipments, connectivity...)

The teacher should be placed in an enabling environment which generates the fancy for work, for the use of ICTs and thus reassure him of his great utility in society.

In this regard, it is necessary to make sure that budget reduction and structural adjustment policies, the negligence of further training and the absence of pedagogic integration of ICTs do not affect the professional future of teachers and all educational staff in Congo.

If we hope to have a significant impact of ICTs on the qualitative development of the teaching staff and a professional future in schools, the objective will be the formulation of a further training policy so as to limit related damages.

The starting point of a successful information technology revolution in education is not technology but teachers. It is absolutely necessary to be wary of being seduced by technology and consider that if we do not have the most modern equipment, one cannot do anything interesting. On the contrary, as far as equipment is concerned, modesty is essential especially in a context where resources are rare. On the other hand, as regards pedagogic exploitation, it is necessary to give vent to its imagination to make the best from the little that we have.

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“The pedagogic integration of ICTs is an improvement factor of the teaching condition and its further training and a necessity to save the Congolese school.”

The paradox of Cameroonian school legislation on ICTs



Joseph Bomda

“Computer science fees should be included in National Education receipts. Otherwise, the integration of private service providers will continue serving the financial interests of tradesmen.”

Circular letters N°26/05/MINESEC/IGE/IP-INFO of 07/11/2005 and N°20/07/MINESEC/CAB of 12/09/2007 modified by ministerial instruction N°27/07/MINESEC/IGE/IP-INFO of 19/11/2007 in Cameroon define the modalities of granting certification of information technology service provider and regulate the teaching of information technology in Cameroonian public educational institutions by private operators. Instead of the latter solely managing the students' dues which amount to 5000 CFA F maximum in the first year and half this amount the following years, the school council is also involved in it, thus rendering information technology fees hybrid. This vagueness, combined with the lack of popularization of these instruments, results in haggling and speculations, sources of anarchy and swindling. Furthermore, though there is provision for sanctions for cases of proven misuse of fees and equipment acquired, their inaccuracy raises one question: are computer science fees revenues of National Education and thus, public funds?

On reading:

- Decree N°96/016/PM of 13 February 1996 setting the modalities of application of law N°95/010 of 1st July 1995 on the finance act of the Republic of Cameroon for the 1995/1996 fiscal year and specifying the revenues of National Education so far applied on Cameroonian soil (Art.5) ;
- Interministerial order N°20/B1/1464/MINEFI/MINEDUC/CAB of 13 May 1996 specifying some provisions of the law above and setting the amounts of revenues of National Education (Art.2 and 3) ;
- Circular letter N°21/A/135/MINEDUC/CAB of 20 September 2001 on the modalities of execution of public schools' budget,

the answer seems to be no. Apart from tuition fees, financial contribution of users to operating costs : fees for issuance of professional identity cards, testimonial letters and results transcripts, certificates to waive age limits and external consultations on educational and vocational counseling; exchange value for materials damaged by students and staffs and activities carried out by students, no reference is made anywhere of computer science fees. Better still,

no other financial or material contribution should any longer be required from students (Art. 6 paragraph 2 of decree N°96/016/PM of 13 February 1996). Moreover, the school council which authorizes the provision of computer science services takes part in the choice of the amount of computer science fees and which purchases the equipment, seems to operate in illegality from the moment when, it is the revenue manager of the school concerned, assists in expenses, and which can collect any revenue of National Education and to effect its accounting allotment.

There is a failure on the part of the educational planner when we know that it is from article 25 of law n° 98/004 of 14 April 1998 on educational guidance in Cameroon that *“ teaching in public institutions takes into account the evolution of sciences and technologies...”*

In fact, computer science fees should be included in National Education receipts. Otherwise, the integration of private service providers will continue serving the financial interests of tradesmen.

Joseph BOMDA

PanAf Researcher, Cameroon

The use of ICTs in education in Côte d'Ivoire: reality and challenges

The 21st century marks the start of the use of ICTs in education in Africa. If in some countries, the authorities have implemented mechanisms to boost this process, it is not yet the case in a majority of them. This delay could be explained by various reasons. For instance, Côte d'Ivoire, a wet and coastal West African country, is part of the countries concerned. What is the situation of ICTs today in Ivorian schools? With 43% of the investment budget devoted to education, why is the country still lagging behind at this stage? What are the challenges that the country is facing?

The reality of the use of ICTs in education in Côte d'Ivoire is far from brilliant. While some countries have well developed educational programmes applied at different levels of teaching, it is not yet the case for the country of elephants. The Ministry of Education, admittedly, has a project in this regard, but it has not yet been validated. The reason most often given by the authorities is the lack of resources with the result that thousands of students complete high school without basic knowledge in computer.

However, considering the importance of ICTs in the training of learners, some schools decided to integrate information technology in their teaching programme and better still, in educational practice. These are especially private institutions that practice the French system and whose access is limited to a certain category of learners considering the excessive cost of education.

Computer lessons lay emphasis on basic Word, Excel and Power Point software whereas the very use of ICTs is done in specific subjects: mathematics, physics and chemistry, management, language, etc from specialised software. .

Experience shows that the results are satisfactory as a whole, students not only learn basic software but they also have access to wide information thanks to the Internet. Educational practices have changed for the exchange between educators and learners is *livelier* considering the fact that the latter have information on lessons through internet research. Teaching conditions are better; learners have updated information and receive training adapted to the requirements of the job market with academic results higher than the national success rates.

From all this it emerges that the use of ICTs in education is not yet a reality in most institutions apart from some schools which have already ob-

tained encouraging results. With the advent of the information technology revolution, Côte d'Ivoire cannot afford to provide education to its youth without ICTs. That is why many challenges have to be addressed: finalizing the information technology project and integrating ICTs in education ; reducing the cost of computers and Internet connection ; integrating ICTs into the training of trainees.

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KOUTOU N'Guessan
Claude

“It emerges that the use of ICTs in education is not yet a reality in most institutions apart from some schools which have already obtained encouraging results.”

Meeting of the International Scientific Committee, 28-29 September 2008



The International Scientific Committee of the "PanAf" project met in Bamako on 28-29 September 2008 to brainstorm on the importance of the reliability of the Observatory's data, the data control/validation process, publications and prospects for the second phase.

After the management team presented the achievements of the project, discussions were conducted on the data validation cycle which led to the adoption of a data validation pattern. Suggestions were later made with the aim of enriching the idea framework for the second phase of the project. Discussions however

remain open.

Finally, the scientific committee will be associated with all publication projects of the "Pan African Agenda on the research in the pedagogic integration of ICTs", the most imminent being a book on the successes and challenges of the use of technologies in 100 African schools.

Participation of PanAf in the Regional Summit on higher education in Africa, 21-24 October 2008



USAID organized a Regional Summit on higher education which took place in Kigali, Rwanda from 21 to 24 October 2008 in which the "PanAf" project was represented by Moses Mbangwana and Martin Onguene Essono. This meeting made it possible to expose the efforts of the "PanAf" project for the improvement of the quality of higher education in Africa.

Participation in the “Gender Awareness Workshop”, 10-11 October 2008



The “PanAf ” project was invited to participate in the “gender” awareness workshop organised by the IDRC for ACACIA initiative projects. Two (2) researchers of the project thus travelled to Johannesburg on 10 and 11 October 2008. The purpose of this meeting was to assist “PanAf” project researchers to better define and integrate the “gender” dimension into the project.

The workshop resulted in the demand to set up regular discussion groups (fora) on the integration of “ gender” into the project.

Calendar of activities



Dear colleagues,

Here is a reminder of important dates, deadlines, etc. for the PanAf project.

February 28th

National meetings have taken place and reports are submitted.

“Validation” meetings at the national level must take place, and a Phase I report prepared and submitted according to guidelines (see below).

PanAf Phase I final national report outline as well as methodological notes:

Introduction (150 words)

Challenges and successes (300 words)

This section is focused on the research process - what methodological challenges were encountered, what lessons were learned?

Brief summary of the participating institutions (300 words)

This section should build on the summaries provide for the “100 Schools” publication - to synthesize schools challenges and successes with ICT integration in the national context.

Evidence-based analysis (1000 words)

This section should be entirely based on data collected during Phase I and shared on the Observa-

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tory - what are the themes and trends, what are managers, educators and learners reporting about the pedagogical integration of ICTs? While this report is to be national, comparative trans-national analysis is important. If a strong theme emerges it at the national scale please contextualize it at a continental scale with reference to data from other PanAf Observatory countries.

Conclusion (600 words)

This section should synthesize the results above and make recommendations – what future research, and what changes to policy and practice, should be undertaken?

If you need help to write your report, please don't hesitate to contact us as soon as possible.

April 22nd-23rd

PanAf regional summit meeting

Members of national teams, the management team, scientific committee, and partners will review Phase 1, publications and methodological challenges. Also, a detailed outline for Phase 2 will be presented and discussed.

May 27th-29th

eLearning-Africa

4th International Conference on ICT for Development, Education and Training takes place in Dakar, Senegal.

June 1st Start of PanAf Phase 2

The second phase of IDRC's PanAfrican Research Agenda on the Pedagogical Integration of ICTs begins.

Keep up the excellent work,

Prof. Thierry Karsenti & the management team

PanAf Edu

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