PanAf EDU ->>

Newsletter of the Panafrican Research Agenda
on the Pedagogical Integration of ICTs

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Educational objectives first…

In this second issue of PanAf Edu, we will learn more about the university institutions across the continent at which PanAf researchers are based, from the University of Cheick Anta Diop in Dakar, Senegal to the Institute of Adult Education and Communication Studies at Makerere University in Kampala, Uganda.

Researchers from Cameroon, Congo (Brazza), Egypt, Kenya, and Mali share with us initial findings on the pedagogical integration of information and communication technologies (ICT). Because this PanAf research is at an early stage, we do not yet have findings on usage of ICT, but rather on infrastructure. Even as we read figures on ratios of learners to computer, let's remember that such ratios are far from the best indicator for effective use of ICT to improve the quality of teaching and learning.

At the Global Knowledge Partnership (GKP) conference last December in Kuala Lumpur, Malaysia, I had the pleasure of attending a panel where Eduardo Monge of the Omar Dengo Foundation spoke. The Foundation has been successfully integrating ICT in education in Costa Rica for the past 20 years, including in rural schools, reaching 58% of the population. When someone asked Señor Monge the student to computer ratio in schools in Costa Rica, he responded simply that he did not know. To measure their success, they look rather at the development of project based learning and of thinking skills.

What is critical, he and other panellists and the rest of us agreed, is keeping the focus on the educational objectives! The aim should be on digital fluency, not just IT literacy, which means using IT to learn and teach. We must also be vigilant not to transfer the responsibility for pedagogy to technocrats. As if that is not enough, we must also develop new skills in partnership development and management.

In the hallways at the GKP conference, I asked the gentleman who represented Geoffrey Lungwangwa, the Minister of Education in the

Kathryn Touré, ERNWACA regional coordinator

Zambia, how they succeeded in getting 3% of the education budget allocated to ICT in 800 schools (of 7800, so far). He replied that it happened at the annual budget planning meetings. When he and others saw that all the money went to teacher salaries, chalkboards and desks, he and others advocated for a futuristic approach in which budget lines be added for computers in schools and ICT training for teachers.

The quality of planning greatly influences outcomes. Namibia is beginning to see benefits of the 2005-2007 process of developing TechNa, Namibia's ICTs in Education Initiative, see www.tech.na, with the Ireland-based Global eSchools and Communities Imitative (GeSCI) known to contribute effectively and humbly to such all important policy planning processes.

Finally, technology will not reduce divides between haves and have nots, between urban and rural folk, between men and women. Social decisions and actions bridge. As researchers from South Africa so aptly pointed out at a PanAf methodology workshop in Nairobi last September, based on 2006 statistics, it is "still the case in South Africa at large that the vast majority of schools simply do not yet use ICT in any way whatsoever. Perhaps most alarmingly, the 2006 statistics seem to indicate that not much progress has been made in regard to such provision in poorer schools over the past five years" (Ian Moll, 2007).

ICT will not magically provide educational quality and equality. We must do that, together.

Kathryn Touré, ERNWACA regional coordinator

Integration of ICT into teaching and learning in Mali: research at the service of effectiveness and quality

Dr Djénéba Traoré, ERNWACA-Mali

"According to 36% of teachers, information tools have considerably changed pupils' ways of learning."

A study of 36 pioneer schools, transnational research carried out from 2003 to 2005 by the Educational Research Network for West and Central Africa (ERNWACA) in partnership with the University of Montreal (Canada) has facilitated understanding of the integration of Information and Communication Technologies (ICT) into education, in five countries in sub-Saharan Africa: Benin, Cameroon, Ghana, Mali, Senegal.

In Mali, questionnaires were administered to 5,690 students (girls: 41%; boys: 59%; average age: 16 years) in 8 primary and secondary schools in the Bamako District and the Regions of Kayes and Timbuktu. According to survey results, 33% of students have an electronic message address, 43% use computers in school, 28.5% in a cybercafé and 19.7% at home. Of students, 71.1% say the use of ICT (a computer and Internet) helps "a lot" in doing their schoolwork, and that these tools are indispensable for their training. Generally, computers are used in learning about various literary subjects (French for the most part) and for science. Of students, 75.5% of them also use ICT for other purposes: 27.2% to learn how it works, 20.2% to surf websites, 16.1% to communicate by e-mail and 12% to chat.

The average age of teachers (123 men and 22 women) who participated in the survey was between 36 and 50 years (45.3%). Of them, 92% are specialized subject teachers and 8% are generalists, teaching all subjects in primary school. Among the first, 46% are literary specialists, 31% scientists, 14% physical education teachers, 9.3% mathematicians and 8% economists. According to 36% of teachers, information tools have "considerably" changed pupils' ways of learning. For 19.9% of teachers, the change has been "moderate" and "not at all" say 20.6% of teachers.

Parents of students who were surveyed (an average of 6 per school) approve of integration of new technologies into their children's schools. Because of this, they readily get involved in school activities and attend regular meetings with the Director and members of the School Management Committee and/or the parent-teacher association.

However, the optimism inspired by these figures should not make us lose sight of a less encouraging reality for integration of ICT into teaching practice. Indeed, although it is far-reaching, the survey is not representative of the prevailing situation on the national scale, because of the selection criteria that dictated the choice of schools. Even within these so-called "pioneer" schools that were studied, access to ICT for students and teachers is limited to 2 to 3 hours per week because of the inadequate number of computers, and the relatively high cost of the Internet connection.

Factors that slow down the generalisation of ICT include: 1/ inadequate human resources training in new technologies (for teachers, school administrators, technicians), 2/ absence of a national ICT curriculum and of a guide for evaluation of newly acquired skills, and 3/ low degree to which ICT is taken into account in PRODEC and PISE, the national policy and strategic action documents.

For more details, see:
http://rocare.scedu.umontreal.ca
and http://www.afriquetic.org

Djénéba Traoré, ERNWACA-Mali

Cameroon: Progressive integration of ICT to improve teaching quality

Having lagged behind in integrating it into the school curriculum in Cameroon, the phenomenon of ICT looks as though it is new. The State's wish to include ICT in development is clearly recognised now. The Bamako 2000 conference "Internet: Bridges to Development" provided impetus for moving forward after 10 years of reflection on the National Plan for Information and Communications Technology Infrastructure (PNCI).

Cameroon's education population includes over 6.5 million students. And, despite difficult access to telephones and electricity, the whole country has taken up ICT and its uses, particularly in education. At the university, the objectives are to train graduates who are able to use ICT in all sectors, to improve management, and to create a regional university hub.

These measures are leading to provision of equipment and ICT in schools and teaching establishments. To date, some thirty high schools use some ICT in teaching. Private schools are equipped too, and integrate these tools in their teaching practices. Mme Biya has provided the State with 20 *Ecoles des Champions*. Each of them has an Internet connection for learning and teaching.

Equipment came first with multimedia centres in high schools and universities, digital campuses which, once introduced, were then to implement official ICT teaching programmes to result in the National Centre for Support to Pedagogical Action (CNAAP). About 70,000 students log in to Internet in their high schools as do the monitors and educational personnel trained as tutors since 2003.

The computer teaching programme in high schools also supports these efforts. A computer-ICT branch was opened in 2007 at the ENS (teacher training institute) to train future teachers to apply educational technologies needed for pedagogical integration of ICT. In addition, UNESCO and the Ministry of Basic Education have elaborated and approved the content of ICT programmes to enable initiation from primary school on, and rational, effective appropriation of ICT by young learners.

Decree No. 2002/004 of January 4, 2002 created a Pedagogical General Inspection in charge of teaching and computer use at all levels. Article 18 of this Decree called for a unit charged with securing the availability and integrity of the computer system; training personnel to use the computer system; and technological surveillance of computers. Integration of ICT is therefore being carried out progressively and primary and secondary schools have begun this initiation.

The presence of ICT and its involvement in teaching is also bringing about a profound change in the education system in Cameroon and is benefiting learning and teaching. At the same time, use of ICT in teaching supposes pedagogical innovation on the part of the teacher. Already seen as a tutor, this teacher must serve as a guide to learners who are capable of independently collecting and analyzing information and using it pertinently to construct knowledge and learning that is really improved.

In view of their large number and despite training seminars, most teachers are still little involved in this exercise which calls for extra work while their working conditions remain in a deplorable state. Even if students and teachers have the tools at their disposal, in the face of lack of time, overpopulation of classrooms, and lack of appropriate methodologies, they give more of their attention to e-mail than to techno-educational activities as shown by Mbangwana and Ella (2006) and Onguene Essono and Onguene Essono (2006).

It appears that this is why it is now urgent, before mandatory and generalised introduction of these new pedagogical means, for teachers and students to be initiated into pedagogical uses of ICT. The difference should be highlighted between the presence of ICT and Internet in an establishment and using them effectively in teaching practices.

The presence of multimedia resource centres in the university, high school or in private structures of all types of teaching is part of pedagogical quality. This expresses Cameroon's political will to improve the quality and the offer of education with as its overriding objective, employment for all.

Louis Martin Onguene Essono,
ERNWACA-Cameroon

Dr Louis Martin Onguene Essono, ERNWACA-Cameroon

"It is now urgent, before mandatory and generalised introduction of these new pedagogical means, for teachers and students to be initiated into pedagogical uses of ICT."

Pedagogical integration of ICT in the Congo: Utopia or reality?

Dr Samuel Mawete

"Brazzaville ENS must prepare teachers to produce knowledge, to mobilise potential and to assist learners in an evolving and uncertain world to construct their social and professional identities."

From current results of our surveys for the PanAf Observatory, it is clear that pedagogical integration of ICT is the political will of the Congolese government, expressed clearly in the national ICT policy through the 2004 document titled "Strategies for ICT development in the Republic of Congo." In this national policy, following an alarming inventory, it is envisaged to make "cybercitizens" of the population of the Congo in conditions of equity and respect for gender.

In other words, training and integrating ICT into all areas of Congolese citizens' life at school, work, and home is envisaged. But of course, there can be no training without trainers.

Unfortunately the desire of the Congolese government comes up against two major obstacles: lack of and sometimes inexistence of equipment; and the high cost of the material. Indeed, how could it be otherwise when the ENS which is responsible for training trainers and supervisors of primary and secondary teaching is sadly lacking in computers? The student/computer ratio of this institution is 115 to one. This means a long wait for the 114th student, unless user or surfing time is reduced and internet access speeds in Brazzaville increased. And if the consultation time were reduced, the computer would be of no use to the user in looking for information or in organising his/her teaching or learning.

So if it is possible to generalize on the basis of the unhappy experience of ENS, it is urgent to move on from soothing discourse to concrete action. Pedagogical integration of ICT in the Congo will only be effective if:

1/ the country has a clearly defined national ICT policy for the education sector with strategies to be set in place in the various schools to promote these new technologies;

2/ the country has appropriate and varied equipment which will be seen in the multimedia rooms and cybercafés that are built for it;

3/ the purchase price of computers is reduced to provide for local computer usage within the reach of all social groups;

4/ integration of ICT is effective in the various curricula beginning from pre-school and in the primary cycle up to the university;

5/ teachers, both men and women, have the possibility to learn to teach and at the same time integrate ICT into their practice.

Without these conditions being taken into account, integration of ICT will be a utopia and we will not have realised the extent of our delay in this matter and we will not have understood the impact of ICT in improving our educational and professional practice.

We now need to break with outmoded initial training models in favour of developing continuous education with periods of learning disseminated throughout our lifetime. Through pedagogical integration of ICT, Brazzaville ENS must prepare teachers to produce knowledge, to mobilise potential and to assist learners in an evolving and uncertain world to construct their social and professional identities.

An emerging information society implies everyone's adaptation, not only to new technical tools, but also to the transformation of the organisation and conditions of work.

If we want to be lucid stakeholders in the current information society, we must adapt ourselves to permanent evolution of the means of communication. This is one of the sine qua non conditions for our survival.

Samuel Mawete, Brazzaville Ecole Normale Supérieure

Pedagogical integration of ICT in Kenyan educational institutions: A situational analysis

This article presents the situational analysis of pedagogical integration of ICT in Kenyan educational institutions. It covers three areas: the status of ICT infrastructure in the sampled institutions; access to computing and Internet facilities; and gender parity in access to ICT. The article is based on data collected on the first twelve indicators for the Panafrican Research Agenda on the Pedagogical Integration of ICT or PanAf project. The data was collected from ten institutions: two at tertiary level; five secondary schools; and three primary schools. They covered mixed sex, public and private, rural and urban institutions. The data collection method involved personal visits to the institutions and interviewing the person in charge of ICT after seeking permission from the head of institution.

An analysis of the ICT infrastructure indicated that tertiary level institutions have the lowest ratio of computers to learners although the number of computers is many. For example, the Kenya Polytechnic, which has 9,420 students and 252 computers, has a ratio of 1:37 while the University of Nairobi's College of Education and External Studies has a ratio of 1:55 with 5,992 learners and 108 computers. These institutions also have Internet connectivity and ICT advisors.

The computers are mainly used for research and training in IT courses. Though high schools have fewer computers with an average of 25 computers and an average ratio of 1:24, there is no Internet connectivity. The better ratio is due to a smaller number of learners. It is notable, however, that these computers tend to be donations from various organizations and most of them are obsolete and are only suitable for teaching basic literacy skills. The status in the public primary schools indicated even lower ratios of 1:37 and 1:69 with an average of 25 computers. There is no Internet connectivity and the computers are used to demonstrate basic computer skills. However, one exception was found in a mixed sex private primary school, which had a ratio of 1:15 with 610 learners. The school also had Internet connectivity using a dial up system.

These differences can be attributed to various reasons. Tertiary institutions in Kenya generate most of their income by admitting self-sponsored students. They also have the autonomy to decide how to use these funds and as such they are able to purchase computers if it is core to their enterprise. High schools and primary schools especially public ones have no such funds and hence rely on donations. Private schools particularly those that target the middle and upper class pupils invest in computers by charging higher fees so as to appear that they are giving better value to the learners, hence the higher ratio of computers and availability of Internet connectivity.

Christopher Gakuu and Harriet Kidombo of the University of Nairobi and Judy Njuguna of the Kenya Institute of Education

Dr Christopher Gakuu

Dr Harriet Kidombo

An analysis of the ICT infrastructure indicated that tertiary level institutions have the lowest ratio of computers to learners although the numbers of computers are many.

PanAf partner institutions

CAMEROON

Department of Education Sciences, Ecole Normale Supérieure, University of Yaoundé I, Yaoundé

Created in 1961, the Yaoundé Ecole Normale Supérieure is a higher education establishment that is dependent on the University of Yaoundé. Its mission is to train teachers for primary school, middle school and high school as well as teacher trainers and career guidance personnel. The Ecole Normale Supérieure has an enrolment of 4,550 students, taught by 125 staff persons and a significant number of support personnel.

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CENTRAL AFRICAN REPUBLIC

École Normale Supérieure, University of Bangui

Bangui ENS is the institution charged with training of trainers in the Central African Republic. It is subject to the authority of the University of Bangui which was created in 1969 and began activities in 1971.

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CONGO

École Normale Supérieure, Marien Ngouabi University, Brazzaville

The mission of this institution is to train teachers for the country's middle and high schools. The Ecole Normale Supérieure is attached to the Marien Ngouabi University, the principal public higher education institution in the Republic of the Congo. Created in 1971 after the dispersal of the Foundation for Higher Education in Central Africa (FESAC), this university counts eleven establishments split into five Faculties, three Institutes and three Schools. Marien Ngouabi University currently has an enrolment of 13,546 students, with 597 permanent teachers and 494 part time teachers, giving a general ratio of 22.69 students per teacher.

Focal person: Jean Pierre Mbakidi, École Normale Supérieure, Marien Ngouabi University, BP 237, Brazzaville, Republic of the Congo, phone: (242) 6721 79 96, e-mail mbakingouabi@yahoo.fr

EGYPT

Women's Faculty of Arts, Sciences and Education, Aïn Shams University, Cairo

The Women's Faculty of Arts, Sciences and Education is considered to be an integrated higher education institution that provides distinguished education for undergraduate female students and mixed graduate students. In more than 18 departments, more than 40 academic programs are being offered by highly qualified faculty staff members. Programs of study provide the society with graduates who are specialized in fields such as Chemistry, Physics, Zoology, Languages, Sociology, and other social sciences. The institution seeks to respond to the needs of society by supporting existing programmes and establishing new ones to meet the changing needs of society such as the department of Instructional Technology and Child Education.

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KENYA

School of Continuous and Distance Education (SCDE), University of Nairobi

Over the past 50 years, the School of Continuous and Distance Education (SCDE) has taken the lead in open and distance learning (ODL) in Kenya. Its activities date back to 1953 when the first Department of Extramural Studies was set up at the University of Makerere in Uganda with a tutor for Kenya residents. As the first institution in the current University of Nairobi, SCDE has always maintained its lead position in the ODL field. It has faithfully carried out its mission to offer quality education and to increase access to university studies and therefore to extend the possibilities of training to the whole population of Kenya.

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MALI
**Institut supérieur de formation et de recherche appliquée (ISFRA), Bamako**
The Institut Supérieur de Formation et de Recherche Appliquée (ISFRA) was created in 1981 and is a post-university and scientific research establishment whose missions are: 1/ training and further education and research for teachers in specialities needed for the operation of Malian higher education establishments and research centres, and 2/ carrying out of studies or scientific and technical research in relevant domains.

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MOZAMBIQUE
Department of evaluation and research, National Institute for the Development of Education (INDE), Maputo
INDE is the acronym for the "Instituto Nacional do Desenvolvimento da Educação" or national institute for the development of education. This institute is under the aegis of the Ministry of Education and Culture and is charged with research and development of programmes for primary education, secondary schools and teacher training colleges.

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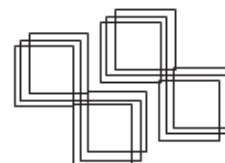
SENEGAL
Faculty of Education and Training Sciences and Technologies (FASTEF), University Cheikh Anta Diop of Dakar (UCAD), Dakar
The Faculty of Education and Training Sciences and Technologies (FASTEF) issuing from the transformation of the Ecole Normale Supérieure (ENS) has to its credit close to half a century of service to education and training of secondary education teachers (PES), middle school teachers (PEM), middle school college teachers (PCEM) and supervisors (specialized subject inspectors, elementary school inspectors and those for preschool education).

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SOUTH AFRICA
School of Education, University of the Witwatersand (Wits), Johannesburg
The University of the Witwatersand (also known as Wits) is an urban, comprehensive university with a distinctive capacity to contribute to the reconstruction and development of South Africa through research and the production of skilled, critical and adaptable graduates. With its more than 100,000 graduates in its 83-year history, Wits has made and will continue to make its mark nationally and internationally.

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UGANDA
Institute of Adult Education and Communications Studies,(IACE), University of Makerere, Kampala
The Centre for Continuing Education (CCE) restructured from another department in 1966, was elevated to the level of Institute for Adult and Continuing Education (IACE) in 1992, with three departments: Community education and extra-mural studies (CEEMS), Adult education and communications studies (AECS), and Distance education. IACE has grown and now has a total of 36 academic staff members, and 73 non-academic staff shared among the departments. The establishment has made great strides in increasing access to University education particularly through its distance education programmes and through short courses run both at the main University campus and at the upcountry centres.

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Has ICT made a difference in Egyptian higher education? Insights from various impact studies

Dr Lamya M. El-Said

"The number of staff trained to use ICT has reached over 40,000 trainees from all Egyptian universities."

There is a need for political persistence to enhance and improve Egyptian higher education as the vital engine in the process of development within society (Ministry of Higher Education in Egypt: 2000).

The Ministry designed an integrated strategic plan for enhancing higher education. This plan was translated into 25 distinct projects, with the objective of enhancing quality, relevance, and efficiency in universities and technical colleges. More than half of these projects were prioritized and grouped into six major projects with fifty million US dollars funded by the World Bank and ten million form national funding. The six priority projects in the first phase of the five-year national plan for 2002-2007 were: Faculty/Staff and Leadership Development Project (FLDP), Information and Communication Technology Project (ICTP), Quality Assurance and Accreditation Project (QAAP), Faculties of Education Project (FOEP), Egyptian Technical Colleges Project (ETCP), Higher Education Enhancement Project Fund (HEEPF).

To begin to assess the impact of ICT projects in higher education in Egypt, a case study was undertaken of Ain Shams University, a renowned institute founded in Cairo in 1950. In addition to document reviews, a total of 31 in-depth interviews were conducted and 10 focus group discussions (two for beneficiaries and eight for non-beneficiaries). For the quantitative data, 233 staff, 311 graduates, and 833 students were questioned.

This study and others show that ICT training is moving, in full coordination with the Faculty Leadership Development Project (FLDP). ICT training centres have been established in Egyptian universities. The number of staff trained to use ICT has reached over 40,000 trainees from all Egyptian universities. The e-learning project is also progressing, with the establishment of a national e-learning centre. A total of 17 courses were converted into electronic format by March 2007.

Assessments show definite progress in other areas including the enhancement of the Egyptian Universities Network (EUN). The digital library is progressing well with 55,000 journals and abstracts made available through online subscription. The number of downloads at the end of September 2006 was 600,000. That number climbed to 869,720 for full text downloads and 669,876 for research downloads by March 2007. Management Information Systems (MIS) platforms have been developed at the Supreme Council of Universities (SCU) and procurement of MIS for targeted faculties planned.

Delays have been experienced in finalizing the EUN infrastructure, identifying the MIS requirements and procurement procedures for all universities, transforming the subscribed journals and databases to SCU account, and executing the 2nd stage of ICT training due to the delay of instalments caused by the transformation of the financial accounts to the Central Bank of Egypt (CBE). The total amount disbursed and committed for ICT projects reached $11.17 million, i.e. exceeded its allocated budget of $10.5 million by 6.34%.

Recommendations for improving impact include conducting meetings with university presidents and the ICT project implementation teams in the Egyptian universities to identify and resolve problems, site visits by monitoring teams to University ICT projects, and closer coordination between the ICT Project management and the Supreme Council of Universities (SCU) to obtain their full and timely support.

For more information, see the Higher Education Enhancement Project (HEEP) and impact assessments at www.heep.edu.eg.

Lamya M. El-Said, Lecturer of educational planning, Ain Shams University, Cairo, Egypt

Methodological workshops in Bamako and Nairobi

Two methodological workshops were organised in September 2007 to launch the PanAf research process in ten countries on the continent. The first workshop on September 6 and 7, 2007 was held at the University of Bamako at its digital campus.

A dozen Cameroonian, Central African, Congolese, Malian and Senegalese researchers took part.

Another workshop was held on September 24 and 25, 2007 at the Kenya School of Monetary Studies (KSMS) in Nairobi, Kenya. This meeting for English, Portuguese and Arabic language speakers welcomed researchers from Egypt, Kenya, Mozambique, South Africa, and Uganda. The official opening was presided over by the Vice Chancellor of the University of Nairobi, Professor Peter M. F. Mbithi who welcomed the participants and expressed the interest of ICT for African countries.

The researchers were initiated into use of the Observatory, www.observatoiretic.org, a transversal database which receives PanAf project research data, making it possible to compare findings from one country to another.

Kathryn Touré, regional ERNWACA coordinator, Thierry Karsenti of the University of Montreal, and the various resource persons, especially the members of the scientific committee, agreed on the importance of these meetings to create a community among the PanAf researchers and within the countries' institutions.

Dramane Darave, PanAf Research Assistant, Webmanager

Prof. Peter M. F. Mbithi , Vice Chancellor, University Of Nairobi

Prof. Peter Kinjanjui, Member of PanAf scientific committee

Scientific writing workshop in South Africa

On February 11 and 12, 2008, ERNWACA, the University of Montreal and Wits School of Education at the University of Witwatersrand will organise a workshop on scientific writing in South Africa.

This meeting which will bring together some thirty participants will facilitate:

1/ strengthening the importance of data analysis, writing and scientific publication within the PanAf project;

2/ working systematically with peers and resource persons to review the stages in the process of writing ;

3/ developing outlines for papers to be presented at conferences and submitted to professional reviews and journals.

Dramane Darave, Research Assistant, Webmanager

ERNWACA Research Grants: Call for proposals

The 4th edition of the ERNWACA Research Grants Program was officially launched on January 10th, 2008. The themes for the 4th edition are:

- African languages, education and culture for development and regional integration;
- Peace and education for citizenship; and
- Education, skills development and employment.

For more information, please consult the Call for proposals at www.ernwaca.org.

Good luck to all of you.

Tècle-Mireille Massouka, Project manager

Videoconference

AUF videoconference room at University of Bamako

On November 27, 2007, the AUF digital campus at the University of Bamako hosted a videoconference session that brought together the PanAf coordination team at ERNWACA in Bamako, the technical partners in Montreal, and the participating researchers in different countries on the continent.

Researchers from six national teams were able to participate, including those from Kenya, Uganda, Mozambique, Senegal, Mali and Cameroon. The use of videoconferencing opened an additional channel of communication between PanAf project management and researchers.

This virtual meeting made it possible to discuss important issues, particularly progress on the upload of data to the Observatory, updating of the methodological guide and receipt of funds by partner institutions.

We were able to note that national teams have targeted at least ten schools for data collection. Because of examinations and academic vacations, some teams are somewhat late in arranging surveys to collect data. But the promise was made to resume work as soon as possible.

Dramane Darave, PanAf Research Assistant, Webmanager

Visits by UEMOA to ERNWACA

Denis Lecallo and Albert Rabiou

In 2007 the Educational Research Network for West and Central Africa (ERNWACA), recognized as a regional Centre of Excellence by the West African Economic and Monetary Union (UEMOA/WAEMU), received two working visits from two different UEMOA teams.

The first UEMOA visit to ERNWACA was on August 27 and 30, 2007 and focused on the evaluation of the competitive research grants project that UEMOA partially funds. This evaluation enabled the UEMOA delegation to understand the achievements and constraints of the project in its operation and implementation in 14 different countries.

It was noted by the delegation that ERNWACA covers all UEMOA countries with the exception of Guinea Bissau and promotes regional and even panafrican integration. The UEMOA team also appreciated the peer review processes of ERNWACA in relation to the research it conducts.

A second UEMOA team visited ERNWACA on November 22, 2007 as part of a multi-country trip to monitor the UEMOA Regional Economic Programme (PER). PER funds a certain number of economic and social programmes and infrastructures in UEMOA member states, including the Programme for support to regional centres of excellence (PACER) to which ERNWACA was elected in 2006. The UEMOA team encouraged partners to formulate new project proposals if appropriate.

This visit culminated in a lunch organised by the French Ambassador to Mali at which the ERNWACA Regional Coordinator was asked to talk about ERNWACA work with universities in the region.

For its part, ERNWACA also carried out three working visits to UEMOA. The first was carried out by the ERNWACA Burkina Faso National Coordinator on July 19, 2007. The second visit took place in November 2007 and the third in December 2007, respectively by the ERNWACA Financial Officer and the Regional Coordinator. The latter two visits enabled ERNWACA to appreciate the need and the particular UEMOA interest expressed in projects related to the pedagogical integration of ICT.

Moise Appolos Théra, Finance officer

Interview with Prof. Mohamed Maiga

Mr. Maiga, ERNWACA member and PanAf researcher, is a Professor at the Faculty of Science and Technology in the biology department. Extracts are shown below from an interview given in September 2007 to Mali-Ntic, www.mali-ntic.com, a Malian gateway dedicated to information and communication technologies.

Mali-ntic : You are the principal researcher in Mali for the PanAf project, can you please explain this for us ?

M. MAIGA : In partnership with the University of Montreal and with funding from the International Development Research Centre (IDRC), ERNWACA has just launched an ambitious project called the Panafrican Research Agenda on the Pedagogical Integration of ICT (PanAf). This large project concerns eleven (11) countries and it is generally located in teacher training institutes and universities. In each country there is a focal person and a principal researcher who are responsible for coordinating all research activities in the country. It is together with his or her colleague researchers that they should collect the data and integrate it into the Observatory site. In essence, this is the work that we have to undertake.

Mali-ntic : How do you carry out this work, have you already started it, or how do you envisage doing so ?

M. MAIGA : We have just held the methodological workshop, to initiate people into data collection and its inclusion in the Observatory. The first data should be ready for October 17, 2007.

Mali-ntic : Let's look at the situation in Mali, how do you see it, and are you hopeful that it will be possible to carry out this work, on what basis can you say this ?

M. MAIGA : We can certainly carry out this work because since 2003, ERNWACA in partnership with the University of Montreal, has been studying the integration of ICT in African schools. And we have all participated in this project. We already know the schools, we have already worked with them, and we know how to approach them to update the data and obtain additional data. This poses no problems for us.

Mali-ntic : But if someone says integration of ICT at the level of education, what does this mean in concrete terms ?

M. MAIGA : Pedagogical integration of ICT at the level of schools, that simply means that teachers use ICT to prepare lessons and teach. It is not a matter of giving additional courses with a computer, but it means that you can teach a course in French literature, science, or history by using ICT and active methods of teaching.

Mali-ntic : But is that easy in Mali ?

M. MAIGA : Well, it's not easy, there are schools particularly private schools that already have computer rooms and that use ICT. Even in public schools, at secondary level, the State has installed computer rooms in practically all the high schools in Mali, with access to Internet. But the problem in Mali is that there is no programme for pedagogical integration of ICT in teaching.

That is to say that the Malian curriculum does not take into account integrating ICT into teaching. That is the real barrier in the current state of affairs. Besides this problem, there is also the bandwidth in Mali which is not huge, and this slows down certain activities and the cost for schools is relatively expensive. So that too is a barrier. The other barrier is that the majority of teachers working today have had no training on the pedagogical use of ICT. For those who have already had this training, there must be follow up. Of course, for several years, the Agency for promoting ICT (AGETIC), with the programme for computerizing high schools has held continuous training, but that remains inadequate. We should be able to generate significant capital in this field so that pedagogical integration can be effective in Mali.

Mali-ntic : Let's come back to the work that you are going to undertake: first the training, what was actually taught during the workshop on September 6 and 7, 2007 ?

M. MAIGA : During the workshop on the 6th and 7th, the PanAf research project was presented to us, then we were shown the tools to use to collect the data. We were shown the Observatory and how to upload data to it. After one year we should have harvested information relating to about one hundred and sixty (160) indicators at ten (10) different educational establishments, from primary through higher, in each of the participating countries.

Mali-ntic: It's true that there are private efforts or initiatives, some State actions, too, but the principal problem is the fact that the Ministry of Education as such does not take this into account. If you

Prof. Mohamed Maiga

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"Let us use these ideas to ensure that our reconstruction and development go ahead in harmony." Nelson Mandela

were asked to launch an appeal, would you have anything to suggest to make this work easier ?

M. MAIGA : If I were to make an appeal, I would ask that at all curriculum levels, we try to take ICT into account. Why? Because that can help not only the teacher but above all the students, because today ICT is present in all areas of activity. We in Mali should not be left out of this global movement. Because no matter what work you do today, you cannot do without ICT. I think the ideal starting point in a country is education. For that the Ministries of Education should do everything possible to make integration of ICT obligatory for training programmes for teachers and students.

Mali-ntic : And do you think this is really possible ?

M. MAIGA : I think it is possible, of course there is not electricity supply everywhere. You can't bring Internet everywhere. We can't ask everyone to have computer rooms. But at least there are improvements, at the level of teacher training colleges, and at the level of secondary, technical and vocational training schools, ICT must be made mandatory. In any case, this is the current dynamic of the Ministry of Education. Today, a computer room is required in order to obtain authorization to open a high school, or a secondary or vocational training school.

Mali-ntic : Do you have a conclusion or something to say, for instance, about ERNWACA's expectations ?

M. MAIGA : I can just ask ERNWACA to continue this initiative to better understand ICT integration in African schools. If this is understood, that could help those in charge of the Ministries of Education to take appropriate decisions for this integration to succeed in our countries in Africa.

Interview conducted by Filifing DIAKITE and Assétou DIARRA, www.mali-ntic.com