Teacher Training in Sub-Saharan Africa: possibilities for quality training

African countries, like other UNESCO member countries, committed themselves during the 2000 Dakar Global Forum to ensure quality education for all. It is a twofold challenge to equitably enhance access to and improve the quality of education. An exercise which requires inter alia, an inventive spirit, a review of existing policies and practices and an exchange of good ones particularly in the area of teacher training.

It is undoubtedly clear that teachers play a crucial role in fostering access to education and in improving its quality. According to the December 2005 Pretoria Declaration, with the right qualifications, adequate wages and other incentives, professional teachers will play a fundamental role in achieving the goal of Education for All and the Millenium Development Goals (MDGs). Studies undertaken over the past three decades testify to the influence of teaching over results. This is all the more obvious in Africa as indicated in the study undertaken in nine African countries by PASEC (Bernard et al., 2004). The teacher effect which runs between 5% and 15% in developed countries accounts for 27% in the African countries where the PASEC study was carried out. Hence, the qualification of teachers and their training in adequate numbers are among the indicators of quality education.

According to the Global Monitoring Report on EFA (UNESCO, 2005), if Africa intends to meet the Education for All objectives by 2015 and fulfil its Dakar commitments, it would need to train about 4 million teachers and ensure that the majority of the teachers to be recruited are professionally qualified. The problems faced in most African countries are many and varied: absence of training policy, no connection between initial training and in-service training, inadequate academic and pedagogic preparation, obsolete and ill-adapted training programmes, lack of pedagogic material, inadequate incentives for teachers due to low wages and the absence of a career development plan, etc.

In order to assist Sub-Saharan African countries most unlikely to reach the goal of Eduction for All by 2015 to synchronise their teacher training policies, programmes and professional practices including national priorities defined toward achieving this goal and the MDGs, UNESCO launched the Teacher Training Initiative for Sub-Saharan Africa (TTISSA). This extensive ten-year programme
shall be implemented in 46 Sub-Saharan African countries by way of a four-year cycle. Seventeen countries have been selected for the first phase: Angola, Burkina Faso, Burundi, Cape-Verde, Central African Republic, Chad, Congo, Democratic Republic of Congo, Ethiopia, Ghana, Guinea (Conakry), Madagascar, Niger, Nigeria, Sierra Leone, Tanzania and Zambia. After the first four years, each participating country should have incorporated in its national education plan, a complete teacher training programme to boost the quality of training in teacher training institutions and envisage solutions to the problem of acute shortage of teachers. It is also expected that the status and working conditions of teachers shall be improved and that countries shall implement international standards and national education policies on the prevention of AIDS.

It is incumbent on the Higher Education Division at Headquarters, BREDa and IICBA to implement the TTISSA programme. One education expert per country shall be chosen to coordinate the national initiative in each of the 17 countries. A meeting held in Darkar in March 2006 served as a platform to define the duties, responsibilities, missions and general working procedures of the seventeen TTISSA coordinators. Discussion focused on teacher training and ICTs, the status of teachers and how teacher training institutions should be run.

This issue of the Newsletter falls in line with the TTISSA initiative and seeks to share with teachers, trainers, researchers, technical and financial partners interested in teacher training, a few experiences, research findings or reflections on the possibilities of rendering teacher training in Sub-Saharan Africa more effective.

The first article is about a primary school teacher training model experimented in Guinea since 1988. In the face of the criticisms about the theoretical aspect of the training, which has nothing in common with teaching in the field, the authors of this article seek to show how training in teacher training institutions in Guinea articulated between theoretical training within the institution and practical training in associated primary schools.

Information and communication technologies are not only a tool to bridge the digital divide, but also an excellent instrument to foster quality education. Usually, it is hard to keep candidates throughout initial or in-service training programmes and this is even harder when it comes to distance learning. Professor Thierry Karsenti of Montreal University addresses the issue of efficiency in open and distance learning. He equally considers conditions to render this mode of education effective and their impact on students in terms of motivation and perseverance.

One of the articles addresses the gender issue in the teaching profession in a bid to raise awareness on the integration of the gender factor in teacher training. The article proposes initiatives for capacity building among teachers, particularly in terms of upgrading their status and enhancing the education of the girl child.

The last article in the Newsletter looks at HIV/AIDS and how negatively it impacts the quality of education due to the high rate of absenteeism, desertion and teachers’ death. In an attempt to address this problem, the author of the article proposes a “social vaccine”, through teacher training as well as better living and working conditions for teachers.

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Introduction

Teacher training, like the whole idea of school, is questionable in many countries today. It raises concerns and is at the centre of institutional and political reforms. Despite all attempts at restructuring, teacher training still appears to be far from meeting the expectations of the society and of its major stakeholders. The teacher training crisis raises questions about the legitimacy and competence of the teaching corp and, above all, the quality of the teachers’ output (Vaniscotte, 1993, 1994). In Africa in particular, the debate on quality education and training has always been eluded or taken over by the issue of democratizing teaching. Authorities are more concerned about increasing the number of classrooms and schools in order to ensure education for all (Maingri, 1977). Although the aspect of quantity is important, it is not the only reason to justify the relevance of education policies. It is along these lines that the objectives of the Dakar 2000 Global Forum can be defined.

Due to the poor performance of teacher training institutions, the government of Guinea opted in 1988 for the training of alternating teachers. Training entails one year of theory in school and one year of teaching practice. Despite the dire need for primary school teachers these past few years, the public service retrenchment policy imposed by structural adjustment programmes backed by donor agencies slowed down the recruitment of qualified teachers year after year. Besides, until 1998 the training institutions were in a precarious situation and less than 200 student teachers were trained in all 8 training institutions for over a period of three years. The student-teacher/trainer ratio was extremely low which led to a very high operating cost. Over the three year period, the cost of training per individual soared. In addition, the training institutions virtually went without teaching materials and operating budget.

Admission of fresh trainees into training institutions was at its twelfth year after stagnating at the tenth year for quite a while. In a system where the progress of students was not subjected to a strict evaluation or examination process, most of the candidates were unfortunately below standards. Hence, the need to change to a system that emphasises on course content (Grandbois et Diane, 2000). Despite such efforts, student teachers still proved inadequate in several subjects upon leaving school, showing a near absence of didactic and psychopedagogic know how.

The practical part of the training left much to be desired even though it was done during the three year period with clear objective of raising the student teacher to a level where he could virtually handle a class all by himself. Students went for teaching practice in a make-shift environment called practice school. Unfortunately, the practice did very little to give the student teachers full responsibility over the class. No particular management scheme was put in place to mainstream the newly trained teachers in primary schools. The primary school curricula were virtually not taken into account in the preparation of course outlines proposed or simulated with student-teachers. All these factors account for the falling standards in teacher-training and in the overall primary education system.

2. The New Initial Primary Education Training Model in Guinea

The current crisis in the teacher training sector calls for more effective training models. The quest for such models is today geared towards professionalizing teaching. The initial training project for teachers in Guinea falls within this context and seeks to design and develop a professional teacher training model tailored to suit the current education system in Guinea.

Teacher training depends on course content and teaching methods for potential teachers as well as on the knowledge and skills required of the teachers and the manner in which they are acquired and developed. Zeichner (1983) uses the paradigm concept to design the principles and hypotheses that form the basis for teaching and how teaching can be learned. He says the principles of teaching and teacher training can be summarized in four basic paradigms which fall in line with current thinking on teacher training (Calderhead, 1992:i). The behaviourist paradigm which views teaching as a set of skills more or less isolated that ought to be practised and mastered; (ii) the practical paradigm which considers...
teaching as knowledge and professional competence to be acquired through practical learning on the ground; (iii) the personality–related paradigm, which sees teaching as a personal development process based on principles and commitments specific to the student teacher; (iv) the critical paradigm geared toward research and sees teaching as a set of investigative and well thought out skills that can help turn around the teaching problem.

The thinking of the people behind the primary school teacher training reform did very little to relate it to a particular reference framework. They rather thought it more imperative to find solutions to the problems of the time and quickly start a project. Hence, their concerns were more pedagogical and economic than epistemological. However, some concepts seemed to correspond with the values shared by the main role players of the sector and suited the environment within which the project had to be undertaken, that is within a context of short term institutional training. Hence, the most important thing in the new training scheme was the practical aspect and the experience of the student–teacher in a real life working situation during training. This could be related to the second and third paradigms. The project laid emphasis on practical teaching during institutional training in the first year and in the second year during teaching practice in real classroom situations, a period during which the personal skills of the student teacher are key to his professional success.

2.1 Alternation in teacher training

The most visible change in the teacher training programme lies in the search for a link between the institutional or theoretical training and the practical training. Hence, the project follows the current international trend that attaches more importance to practical training in real classroom situations (Bujold et Cote, 1996). The new model was inspired by the alternating system, which advocates the idea that the student teacher will learn better if there is a stronger linkage between institutional and practical training. According to this approach, it is easier to learn by concrete application of lessons learnt in theory.

If in the previous model training was basically institutional and student teachers were expected to apply to the letter in a practising school the theoretical knowledge gathered during training, the model adopted by Guinea rather seeks to acknowledge the fact that real classroom situations are indispensable for the acquisition of knowledge and know–how.

There is a growing desire in teacher training to acknowledge teaching as a profession with the school environment and the community playing the role of partners (Théberge et al., 1997). Becoming a teacher today no longer has anything to do with the age old idea of a calling, but rather a profession in the sense of a well organized and programmed activity that calls for a series of professional skills. Teaching requires some specific skills which only a solid professional and pedagogic training can provide (MEQ, 1993). Professionalising teaching and teacher training calls for the rationalization of knowledge and capacity building in the exercise of the profession (Bourdoncle, 1991; Perrenoud, 1994).

2.2. Components of the emerging initial teacher training model in Guinea

The alternating model in the teacher training programme has two major components namely, institutional training and practical training in real classroom situation. However, the teachers in both cases are not necessarily the same. While insisting on professionalism during training, the idea is to alternate between theory in the training institution and practice in primary school classrooms under the pedagogic supervision of experienced teachers (associate teachers) and school headteachers (associate directors). Teaching practice is undertaken in associate primary schools. Students admitted in the training institution are holders of at least the Advanced Level Certificate. The course is a two-year programme. The first year is dedicated essentially to pedagogic and psychopedagogic training while the second year is basically practical teaching in real classrooms. During teaching practice the student teacher who is mentored by a pedagogic adviser and an associate teacher is in charge of a class.

One of the innovations in the project is to initiate a training system that is basically didactic and
pedagogical rather than course content oriented. Hence, institutional training focuses on four main subjects in primary school (French, mathematics, science and technology, human sciences) and educational sciences (psychopedagogy and assessment). The didactic and pedagogic orientation proposed in the project is drawn from a philosophy in education which focuses on the student and the active role he plays in the learning process. A proposal was made from the onset to adopt a socio-constructive approach to develop a teaching-learning approach while remaining open to various modern teaching methods.

Teaching practice in real classrooms is an innovation to encourage the student teacher to be introspective on his teaching experience and get groups of student teachers to regularly interact and share ideas in weekly meetings. In addition, once back in the institution, student teachers take part in an exercise to objectively assess their two-year long training and sit for their final examination. A certificate is awarded at the end of the course on the basis of the overall grade of all the stages in the training programme (40% for institutional training, 40% for practical training and 20% for teaching practice).

3. Skills Developed by Student Teachers

Teaching is a complex activity which entails several responsibilities (course planning and preparation, classroom management, maximum use of available resources, continuous assessment, collaboration with peers, parents and the community, etc.) which require the teacher to constantly take professional decisions. Two years after the programme was initiated, a follow up was conducted thanks to which these various aspects were considered. The findings of the follow up listed the characteristics of student teachers, their teaching skills and their perception of the practical training they went through. They equally shed light on the performance of trainers in training institutions and described the job of pedagogic inspectors, their perception of the skills of student teachers and the relatioship they have with the rest of those involved in the profession.

Concerning the skills of student teachers, the head teachers describe in detail their ability for course preparation. Students shall improve on their skills in class with time and ultimately succeed in handling group work on the basis of clear instructions given to them. However, they need to improve on some aspects of their teaching assessment skills. Similarly, the student teachers have the tendency of using school text books as their sole teaching resource whereas such books are there to serve as guidelines, particularly when adapted to the curriculum or parts of it. The head teachers believe that the student teachers sometimes stick to their course outline and leave no room for other models. Yet, there must be flexibility in the way students use the lessons learned in training college for the simple reason that not every single lesson learned is applicable in the classroom. Consequently, there is need for the students to participate in in-service training sessions of other projects.

According to observations made, student teachers acquire the basic teaching skills to enable them teach in primary schools. They generally know how to plan their lessons and use group work with their pupils. However, at the “final” stage, student teachers can’t get their pupils do an objective assessment of the students’ performance.

All the officials concerned who were interviewed were satisfied with the students’ ability to prepare their lesson notes. Most of the students have a mastery of the various stages involved in preparing a lesson. The few who are not yet conversant with the procedure have a number of academic shortfalls to be corrected and their language polished. From discussions with their teachers, it is obvious that the students can change the primary schools. However, they sometimes would not want to accommodate new models convinced that the model they are used to is the best. Nonetheless, those who are involved in other training projects acknowledge coming in contact with other good models which can be effective in the classroom.

Associate teachers receive ample information to enable them guide the students through the course. They sometimes direct their remarks to the students in class, giving them helpful tips in the process. Some of them go as far as preparing lesson notes with the students and work hand in hand with the latter in other projects. The teachers fully play their role as supervisors even though they run into difficulties time and again especially when the students are posted to remote areas for teaching practice. They supervise the students in class all right and organize regular working sessions with them, but do not sufficiently work with them on their introspective analysis and portfolios, although this is the backbone of the practical training.

The balance sheet of the training in 2004 revealed the need to formalise the training programme, review the admission criteria given that most of the students have plenty of academic shortcomings upon admission, harmonise the teaching structure and redefine the practical training programme which currently shows lots of loopholes. For that reason, a programme initiating a new model and a modular approach has been proposed. The training structure has been harmonised while the role of supervisors during teaching practice has been reviewed.

The most positive outcome of the teacher training experience is the common desire to go beyond mere alternation in teacher training. The teacher trainers have requested to be more involved in supervision during teaching practice while the pedagogic advisers are asking for participation at the different training sessions to evaluate teacher trainers. It is rare to come across associate teachers or pedagogic advisers in the project who claim to know nothing about the training programme, the supervision exercise or what is expected of them.Linking up coherently and continuously the course venue and the timing has become a constant challenge which the various categories of actors involved in the training are seeking to address. There is plenty of hope considering that the officials in charge of the training and those in charge of the students have a common duty to define a primary school teacher training policy and to transform the teacher training institution into an outstanding regional training centre.
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Encouraging Students to Persevere in Distance Education: 
Pedagogic Strategies for Africa

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Information and communication technologies are not a universal remedy, [...] but can greatly contribute toward improving life on earth.

Kofi Annan, 2005

Introduction

Several studies have put the success rate of distance learning at 20 to 45%. The strategies adopted by the team of the University of Montreal in collaboration with partners like the UNESCO International Institute for Capacity Building in Africa (IICBA) and the Francophonie University Agency, account for the success rate recorded in several subjects, sometimes over 90%. This article briefly looks at the importance of information and communication technologies (ICTs) for Africa and addresses the efficiency of open and distance learning. It goes on to consider the possible conditions for efficiency and how best they can serve as incentives and a source of perseverance for students. The objective is to better understand these strategies likely to enhance the success of African students taking part in a distance learning programme.

Information and Communication Technologies: how important they are for Africa

Several changes have been recorded in society in the past fifty years namely, the advent of television, video and information and communication technologies (ICTs). For many people, the most spectacular change has been the advent of the internet, particularly the graphic version fondly called the Web which has changed and will continue for a long time to change our lives and the world of communication. Figures which testify to the ever growing presence of the internet are quite impressive: 650 million internet users in 2005 (source: Ipsos Reid firm), figures likely to increase twofold in two, three years to come; 550 billion documents posted on the internet, 95% of which are accessible to the public; some 7.3 million new Web pages supposedly created daily. The knowledge society promised in the 1970s, acclaimed in the 1980s and dreamed to come true in the 1990s, though with mixed feelings of respect, incredulity and fear, has now become an unavoidable reality for many countries in the 21st century.

So what about Africa? The omnipresence of ICTs in Africa is simply unavoidable, particularly in the area of education, in order to encourage information accessibility, scale up the academic success rate of university students, improve the professional standards of the teaching staff, encourage leadership in management, interaction between universities and the community, enhance south-south, and north-south relationships. ICTs are very powerful tools with a cognitive potential that offers a series of solutions to the current problems facing the education sector in Africa. Africa also has the right to train high brow university experts in ICTs and education.

How Effective is Distance Learning?

For several years now, higher education has grown at a spectacular rate and it is equally marked by changes. University education is very much into digital information, internet and e-education. According to many sources, teaching with or by ICTs is the most dynamic and most popular sector in the education market, particularly at university level. However, despite the ever growing presence of ICTs in our society, there are still many questions on the relevance of open and distance education: Are they a better kind of education? Are they more effective?

L’ACGME recently stated on its website (www.acgme.org/) that distance learning in whatever form it may take is the « hottest, sexiest, most controversial issue in American higher education ».

A cursory look at journals and reviews on higher education in North America and Europe clearly testifies to the marked interest in open and distance learning.

Possible or established outcomes

For many people, open and distance learning is more effective than traditional classroom teaching, particularly in terms of effective research. Studies carried out prove that a student can learn more and faster with ICTs and online courses than he would in a normal classroom situation. Advantages abound in terms of flexibility, accessibility and better interaction. Besides, there are several modes of teaching and learning. In general, learning and teaching in this manner are better and tailored to the realities of the student. For example, open and distance learning are particularly useful to students who can’t follow regular classes on campus on account of a tight schedule, a common problem facing many university students in Africa. Online courses with ICTs support affords them the opportunity to work at their own pace having a flexible timetable within an interactive environment where they can exchange views with colleagues and teachers.
Questions and limitations

However, despite the growing number of studies in Europe and North-America which testifies to the fact that open and distance learning with ICT support are generally very effective, particularly in terms of teaching knowledge acquired by the student, there is plenty of literature which says there is a marked difference between e-learning and traditional classroom education (Ungerleider, 2002, Rusell, 1999).

The success rate of students in open and distance learning equally goes to support Russell’s argument. Gauthier who undertook a study in 2001 for a recruitment and training observatory in France says that most sources agree to an average dropout rate of 80% (between 70 to 90%) at all levels and for all training programmes put together (universities, professional institutions etc.). The results in some major universities which claim to be experts in open and distance learning are alarming: Thailand’s Sukhothai Thammathirat Open University, in five years, 17%; Indira Gandhi National Open University, 22 %; British Open University, 45 % in eight years and 48 % in ten years; National Distance Learning Centre (CNED), less than 20% in some subjects; Geneva University, 29.3% (www. unige.ch). A look at these studies and the divergent views therein are proof of the fact that the challenges and advantages of open and distance learning are usually blown out proportion.

The two contrary and extreme views lay particular emphasis on technologies as if they were the only key to the efficiency of such a mode of education.

How to Guarantee Effective Distance Learning

The contradictions noticed in research findings on the effectiveness of open and distance learning with ICT support seems to indicate, over and above the major differences on research methodology, that efficiency here would mostly depend on how well or not the training is designed.

Research in distance education

From a corpus of 127 courses on the internet (until 1997), Boshier and his team underscored the elements that underpin effective e-learning. The findings of the study establish that the courses: (1) must be attractive, (2) accessible and (3) ensure a high level of interaction. The findings equally reveal another crucial problem common in distance education, inferiority complex. Generally, experts in distance education have the tendency to feel “inferior” to those in face-to-face education and have to work extra hard to simulate the interaction that one would find in a real campus. To this effect, Boshier and his colleagues assert that «... the problem is that in trying to emulate the ‘real’ campus far too many authors have replicated the most rotten, demeaning, archaic and unfortunate manifestations of face-to-face education. »

Since the study undertaken by Boshier, there has been a series of research and reports on how effective open and distance learning can be, particularly e-training. Nouveau-Brunswick’s Tele-Education, like the study carried out by Boshier and his colleagues, emphasizes the importance of interaction in open and distance education, particularly synchronous and asynchronous interaction. With the ever growing presence of the internet, the report equally lays emphasis on the nature and variety of media resources put at the disposal of students. The report of the International Distance Education Certification Center (IDEC), for its part, highlights the mechanisms required to improve the platform and support structure for students and some elements that were not present in previous studies.

The Higher Education Program and Policy Council addresses for the first time issues like intellectual law, scientific validity of content and other aspects like teacher training in distance learning. As for the Institute for Higher Education Policy, which did a meta analysis of the various studies and the best practices in online training, it spotlights 24 possible ways to guarantee efficiency which could be sub-divided into six categories namely: institutional support, development and course structure in distance learning, teaching and learning standards, support to students and trainers and assessment criteria. Just like the three previous reports, the Quality on the Line report underscores the importance of evaluation modalities in distance education, the desire of universities to have quality training comparable to the normal kind of education in order to challenge the media criticism on the lack of scientific thoroughness.

Pedagogy in distance learning

E-pedagogy is currently one of the major university innovators. Thanks to e-learning, groups and individuals can now learn online. Besides pedagogic principles and theories that cannot be ignored like those propounded by Thorndike (the law of effect and practice), Dewy (learning by action), Piaget (building knowledge), Vygotsky (learning as a sociointeractive process), can be applied more easily and more regularly.

However, except for Nouveau Brunswick Tele-Education, most studies undertaken until recently make very little reference to “pedagogy” in e-education. Yet, pedagogy as underscored by Depover, Giardina and Marton (1998), is fundamental considering that the goal of distance education is not to attract the public through baseless and superficial means. On the contrary, the establishment of training facilities in universities should rather seek to facilitate learning. Many researchers say open and distance learning at university level should provide added value to the educational mission of the university (Perrenoud, 1998). The project or problem approach is well suited to distance learning. Moreover, the OECD education committee stated in its report of the seminar on ICTs (2001), and in the recent report on cyber information (2006), that it is not a matter of grafting the use of computer onto existing pedagogy but rather adapting teaching to the new possibilities that ICTs have to offer.

Graham and colleagues (2000), conscious of the very little concern for pedagogy in distance learning, decided to evaluate online courses on the basis of the seven fundamental principles
of effective pedagogy propounded a few years back by Chickering and his colleagues (1993). Moreover, according to Chickering and Reisser, the seven principles are usually used to evaluate real classroom situation teaching based on the principles of Chickering and Gamson (1987), which they applied to four online courses (see table 1).

**Psychological factors involved in distance learning**

In addition to support given to students, recent research findings have proven that they should be given support up front. Most of the studies undertaken (Karsenti and Larose, 2001) including the last OECD report on cyber training (2006), prove that psychological factors are increasingly playing an important role in distance learning. The attitude and motivation of students – as is possibly the case in real classroom situations – features among the key factors likely to predict their success in online courses.

According to the cognitive evaluation theory (Deci and Ryan, 2000), students could feel motivated in distance learning if they had more self determination (if they had more choices, control in the activities undertaken during online courses), if they felt more competent or again if the fact of learning online could increase their sense of belonging (affiliation) with a group.

Various studies have identified other parameters intricately linked with the seven principles of effective teaching. Do the projects undertaken encourage students to take up more responsibility? Do the activities undertaken enable students to have quick feedbacks regularly? Does distance learning make education more attractive and varied? Do new technologies add more pedagogic value to education? Does the activity proposed to students constitute a real challenge? With the adoption of new technologies, are students aware of the effort they have to make? Do ICTs encourage greater student participation, more active learning, or can they be more committed from a cognitive point of view? Do the pedagogic activities proposed help the students set goals for themselves?

**Information Variety and Quantity**

The study on tele-education by Nouveau-Brunswick revealed that the more information students have at their disposal, the more important it is for them and such a practice should be encouraged in distance learning, because not only does it enhance access to resources which were hardly accessible in the past, but ICTs equally facilitate mutual exchange of knowledge.

### Conditions and context for effective teaching

Research conducted so far reveals a model synthesis which outlines conditions for effective distance learning. The conditions are based on a key principle: online training should encourage better learning or better teaching skills. From all the factors identified, the following conclusion has been drawn: there are all in all seven major conditions for effective distance learning.

Table 2 shows each of these conditions and the underlying justification in relation to distance learning.
## Table 2: How to guarantee efficiency in distance education

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<tr>
<th>CONDITION FOR EFFICIENCY</th>
<th>DISTANCE EDUCATION</th>
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| 1. ACCESS / APPEALING FACTOR | - Training is simple and access is easy.  
- The device is attractive and makes internet surfing user-friendly. |
| 2. INTERACTION / COMMUNICATION | - The device encourages teacher – student and student – student interaction.  
- Communication tools are many and can enhance synchronous and asynchronous interaction. |
| 3. CONTENT | - Content is validated by field experts.  
- Content represents high hopes for students, but remains the same as in normal classroom situation.  
- Content is crafted in a user-friendly manner.  
- The modalities for evaluation which are fundamental in measuring the targeted levels of competence by participants are the same modalities proposed to students undertaking similar courses in normal classroom situation. |
| 4. PEDAGOGIC APPROACH | - Course has clearly defined goals and objectives.  
- Course encourages active participation of students.  
- It encourages cooperation and collaboration among students.  
- Encourages customized teaching /learning (learning at one’s own pace etc.).  
- Uses pedagogic approach eg. problem approach or project approach.  
- Encourages the development of incentive-oriented factors (self – determination, feeling of competence and sense of belonging). |
| 5. RESOURCES | - Course proposes a world of resources to students.  
- It proposes a wide variety of resources to students (documentation, audio and video outfits, Web sites, etc.). |
| 6. SUPPORT | - Course has a technical and pedagogic support both for teachers and students.  
- It encourages teacher training.  
- It raises the awareness of students on the challenges inherent in e-learning.  
- A detail course programme is available for students.  
- A methodical approach is proposed to students. |
| 7. SUSTAINABILITY AND ETHICS | - Improvement and sustainability of the course is possible thanks to a system of continuous assessment.  
- Ethical aspects just like those related to intellectual law are taken into consideration in the elaboration of the course. |
Distance Education: A Must for Africa?

Initially poised to impart knowledge, university lecturers in Africa today have to accommodate the idea of students browsing the internet for knowledge. With the ever-growing number of students involved in the universal internet culture, some of them do expect in their training rapidity and easy access to information on the Web. It has been noticed that with the advent of the internet, the various possibilities of interaction have disrupted the traditional academic hierarchy which existed in the past. That is why it is possible to say that technologies will profoundly offset the classical forms of education. Students now evolve in a context marked by change: in African universities students no longer rely solely on the lecturer or books for knowledge. The internet is, in the main, the primary source of knowledge. It is gradually and sustainably changing modes of thinking, teaching and communication. However, if such changes can create interesting opportunities, they equally impose new ways of considering university teaching in Africa. Otherwise, combining ICTs and the age-old traditional methods might not bring about much of a change in education. E-pedagogy is a blend of information and communication technologies and all the best pedagogic strategies drawn from major theories. E-pedagogy does not mean altering the substance of what has to be taught or learnt. It is the teaching or learning method that changes.

In the near future, the challenges of distance learning in Africa shall increase twofold. First it is important to draw attention to the lack of documentation on existing experiences in the field. Development projects are many and huge financial investments are being made, but very little scientific and rigorous assessment is done to know the real impact of these new modes of education in African universities. Just like in applied or pure sciences, research in distance learning is fundamental if the public has to know about this new and emerging field of education.

Lastly, how do we guarantee that technologies - which are known to be historically unstable and generally designed for purposes other than teaching - can really enhance open and distance education? There can never be a solution without risks involved. The high drop out rate recorded in universities and the reluctance of many lecturers and professors are a constant reminder. However, this does not mean becoming debilitatingly cautious. Lecturers should demonstrate a sense of dynamism and discernment. They should be able to strike a balance between maintaining age old practices which have always been and continue to be the backbone of university pedagogy, providing students the opportunity to avail themselves of new possibilities through distance learning. Despite all the problems, there is no real alternative for university education in Africa. Distance learning is a must for the continent.

Conclusion

In projects of distance learning undertaken with Montreal University and its partners like IICBA and AUF, without necessarily claiming to have complied with the various principles and factors mentioned above and fulfilling all the conditions to guarantee efficiency, we, however, succeeded in obtaining an interesting rate of qualifications. In Mali and Niger, for example, where we worked in partnership with IICBA, we achieved a rate above 90%. This, regardless of the quality of the programme produced by Montreal University, is the fruit of the labour involving the education ministries of both countries, support from training institutions, commitment from partners and monitoring on the part of IICBA. Generally, the training undertaken by the Montreal University since 2000 in Sub-Saharan Africa has made it possible to understand how to guarantee efficiency in this kind of training and particularly to encourage the use of communication tools to encourage and motivate students to stay on – a daunting challenge for distance education.
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Gender Equity in the Teaching Profession in West Africa

-The way forward -

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Mainstreaming Gender in the Teaching Profession

Mainstreaming gender among other concerns in the teaching profession was one of the priorities of “The First Annual Workshop On Capacity Building for Stakeholders and Teacher Training Institutions in Freench Speaking Africa” held in Dakar, Senegal, from 12 to 18 December 2005. The workshop drew participants from teacher training institutions in 10 African countries and their major scientific and technical partners: The Paul Guerin la Joie Inter university centre (CIPGL), Quebec University, Montreal (UQAM); Training Engineering Research and Innovation Laboratory (LIIF), Lugano; Education Development Agency for Africa (ADEA) and its Teaching Profession Working Group (GTPE); UNESCO through the International Institute for Capacity Building in Africa (IICBA); African Virtual University (AVU). Together, participants brainstormed on a series of challenges, research and convictions on the quality of the teaching staff undergoing initial and in-service training.

If quality has to be achieved, gender is an avoidable passage considering the fact that the participation of women in the field has a positive effect on school management and on the education of the girl child in particular. Besides, it is a source of encouragement for the girls to stay in school. Hence, in the general context of education and in the teaching field in particular, the concept of gender is intricately linked to the notions of discrimination, discrepancies, negative stereotypes, and equal access to education, equal opportunities and the representation of women in the sector. Taken as an instrument of analysis, gender spotlights the man/woman, girl/boy relationship in specific contexts. Gender, taken from a specific or general perspective, entails a change of attitude or mentality, a key factor in the development of quality education.

Gender is not a new component in education. Many teacher training schools and partner institutions do have gender friendly policies, strategies, programmes and procedures. The United Nations emphasized on this in 1995 during the Fourth World Conference on Women in Beijing (China), which highlighted women empowerment as one of the key development goals of the 21st century. A platform for action was adopted to ensure that all development policies and programmes should incorporate a gender-friendly approach. The education of the girl child, therefore, became an integral part of the 12 priority areas of the programme of action. Lastly in 2000, objective 3 of the Millennium Development Goals sought to “promote gender equality and women empowerment” and eliminate gender disparity in the teaching profession. All these say it all about how important the problem is.

Still in the context of education, World Bank sponsored programmes seek to promote gender equality, considering that the education sector is crucial to countries’ development and economic growth. Part of the programme, Education for All (EFA), is dedicated to the education of the girl child to ensure girls’ 100% access and completion of the primary cycle in countries south of the Sahara. The approach intends to boost access and gender equity in primary, secondary and tertiary education and reduce the education gap between urban and rural areas (geographical equity) as well as boost education standards by raising the wages of the teaching staff (men and women alike), bearing in mind that the number of the latter is extremely low.

The issue of gender in the education system features among the priority concerns of the United Nations institutions. It is important to appeal to the various national and international institutions working for the good of quality education to assess the impact of the gender approach in their actions.

The Gender Approach in Training and Partner Institutions

Partners in the consortium are each working toward the recognition of the gender issue in the field of education. For example; ADEA lends support to FAWE which conducts research on the best possible ways of luring women and girls to school. The FAWE group has undertaken several actions; designing tools to examine the gender problem, research and actions, alliances and partnerships for the capacity building of individuals and institutions, increasing the participation of women in the education system.

IICBA for its part endeavours to ensure that UNESCO honours its commitment with respect to gender equity and the achievement of the Beijing and the Millenium goals. Teacher training falls within the ambit of the International Institute for capacity Building in Africa (IICBA). General policies and activities on teacher training in Sub-Saharan Africa have been drawn up, either by direct teacher training programmes or seminars in schools or by providing training modules.

The International Paul Guerin Lajoie Centre (CIPGL) a scientific partner attached to the Quebec University in Montreal (UQAM) does not have a gender mainstreaming strategy per se, but its main research programmes initiated in Africa paid special attention to women in the...
teaching field. The initial training reform project for teachers in Guinea, funded by the World Bank, encouraged the recruitment of 40% women out of a total number of 6,000 candidates. The Institutional Support Project to Networks in West and Central Africa for Research in Education (ROCARE) addressed the issue of the status of women in the teaching field in many of its studies carried out in Mali, Senegal, Burkina Faso, Niger.

Lastly, all 10 African countries represented at the seminar workshop confirmed having taken into account the gender perspective since 1994/95 in a bid to bridge the gender gap. This was done under the aegis of the United Nations in preparation for the Beijing Fourth World Conference on Women which culminated in the drafting of sectoral policy documents on women empowerment and the education of the girl child. Both of which had become a mantra in elementary education on account of the glaring absence of women and girls in schools.

**Which Gender Strategy to Adopt or Explore?**

It was noticed during the debate and presentations that the issue of women in the teaching field did not have any strategy in higher teacher training and partner institutions. Hence, in the absence of any gender related policy per se in the profession, it is fundamental for every education expert and researcher of either sex to incorporate the approach in their profession. Similarly, no country research programmes on women on education can afford to be silent over the gender issue if it intends to foster equitable and sustainable development. The effective participation of all stakeholders, particularly women, in the teaching field is fundamental. Hence, over and above gender as a choice of concept, it is also a question of methodology and mode of analysis to measure the existing disparities in the area. This approach enhances better applicability of research on the ground, collection of sex disaggregated data, better understanding of the situation in order to find adequate solutions to the problem. For participating organizations, the approach may be twofold, either progressively or concurrently.

The cross-cutting or integrated gender approach is currently being implemented by Senegal’s Ministry of Education for the past two years. In the Human Resources Development (HRD) there is a general strategy on gender in the education system which is based on: (a) training of trainers, teachers, pedagogic advisers and school directors on gender (about 1,000 every year) as well as training institutions; (b) developing policies and tools that will take into account the gender perspective in elementary school curricula, teachers’ oath, a manual to capitalize on the approach used etc; (c) the establishment of structures likely to play the role of an observatory, monitor and adviser.

A specific approach to gender would be to strengthen the institutional capacity of schools and training institutions and develop procedures to be followed according to a clearly defined methodology. Irrespective of the good will shown by officials, decision makers and teachers, they should be able to develop gender-friendly programmes based on specific principles, values and measures like gender awareness. During this first workshop countries like Burkina Faso and Guinea testified to specific measures taken by their respective governments for the benefit of female teachers, particularly during recruitment. In the Initial Training Project for Teachers in Guinea, thanks to the selection criteria, women have been allowed to sit for the competitive entrance examination and in the recently recruited batch of teachers, women account for 40% of the total number. In Burkina Faso, where unionism plays a very important role in the society, women in the teaching field do enjoy certain advantages which take into account their status (pregnancy, social security, vacation etc.).

For a more effective implementation of the gender approach, some practical modalities can be recommended: making provision for material and financial resources in the programme budget and/or specific funds to start certain gender friendly activities. For example, comparative research, based on action in order to identify obstacles and possibilities relating to gender in the teaching profession by:

- Providing support or expertise on gender in conducted research and in the publication of their findings to stakeholders as well as in the implementation of evaluation policies in institutions concerned;
- Working in collaboration with national institutes which have developed gender mainstreaming strategies in their training and staff recruitment programmes;
- Undertaking a general action in the education system to promote further participation of women in teaching, administration and school management;
- Holding regional meetings to enhance reflection and exchange of ideas on the women and gender problem in order to harmonise information and build on successful experiences.

**Conclusion**

As noticed, the gender issue appears on the agenda of partner countries from time to time. It is increasingly becoming a source of concern and reflection as to when it will be mainstreamed in education policies, mechanisms and practices. All the countries concerned either from North or Sub-Saharan Africa are willing to mainstream gender equality in the education system. Yet, the reality on the ground is not that obvious. It is torn between a short-lived commitment and the likelihood of partial or incomplete mainstreaming during the implementation of school programmes. There is need for a permanent structure within the ministry of national education which will work in tandem with scientific and technical partners and serve as a platform for planning an observatory to monitor gender related issues.

If gender is the outcome of a systematic institutional approach and the will to work toward the participation of women in the teaching field, it is important for the programmes and initiatives to take into account the needs of women and girls from primary to teacher training level in order to enhance their status and their influence on the education of the girl child as a whole.
Teaching in an HIV/AIDS Context

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School and Society

For a society to live and develop there is need for social cohesion and the school in many respects has always played a key role to that effect. It is a blending factor given that people come from different horizons to share the same values and live together. The school prepares the mind for division of labour enabling each and every one to learn and acquire skills in any professional field of one’s choice. For some, school plays a more important role than the family which is more concerned with affection. But can the school stand up to the challenge of HIV/AIDS which is seriously damaging the social and family fabric? If the virus attacks the education system at two levels namely, the level of demand (pupils and students) and supply (teachers and school administration) thereby affecting the quality of education, in other words, it attacks the society in the same way it attacks the human immune system.

Impact of HIV/AIDS on Demand and Supply

With respect to demand, the output of HIV positive teaching and administrative staff is seriously affected due to repeated absence, sick leaves, desertion and death. For teachers, the question of absenteeism, transfers during the academic year and death, have serious effects. First at primary level, village schools with multi-grade classrooms are the most affected following the death of one or two teachers. Sometimes the schools are forced to close down for want of teachers. The number of teachers who die of AIDS is alarming. However, the death rate is much lower than the figures projected by experts. Except for Malawi and Zambia, the mortality rate in most countries with available data has not yet attained 1.5%. In Zimbabwe, for example, 1% of teachers died in 2001. This was four times less than the projected figure for that year. In Botswana, which has one of the highest HIV/AIDS prevalence rates, the difference between the projection and the real figures is about six times less. At secondary school level, the death of specialised teachers (physics and chemistry for example) can lead to some subjects being scrapped for want of teachers to replace the dead ones. The school administration is weakened by the absence and death of its staff members. Besides, budgets are generally too small to bear the funeral expenses and allowances to be paid to the bereaved spouses.

Students for their part are mostly affected by the impact of the epidemic on their parents. The fact that HIV positive women have limited chances of having children and that their children are most likely to be born HIV positive, reduces the number of children who go to school. Besides, in most cases children who lose their parents to AIDS-related diseases find it hard to complete their education. Repetition and school drop out rate among orphans can be quite high if they do not get assistance from other members of the family who can be of help.

Teachers, a High Risk Group

Teachers in Africa are usually labelled as a high risk group. In countries with high prevalence rates, studies have shown that HIV/AIDS might have a devastating effect. For example, BBC World reported in November 2002 that one teacher out of seven in Malawi was likely to die of AIDS.

There are two main reasons why teachers are so vulnerable. First, it is a young profession in most countries; in other words, most of the teachers fall within the most vulnerable age bracket. In addition, women form the bulk of the teaching staff in many countries, but unfortunately, they are increasingly being affected by AIDS in large numbers. Secondly, it is generally believed that teachers are more prone to high risk behaviour than the rest of the community on account of their frequent transfers from place to place. Besides, they are more financially well-off. It is also suspected that teachers have sex with students, but surprisingly, there are no major studies on the profession and HIV/AIDS yet.

The private sector generally undertakes similar studies by way of anonymous voluntary screening, studies on high risk behaviour (alcoholism, multiple sex partners, sex workers and the use of condoms).

In the absence of this information, the only way to fathom the impact of the epidemic is to analyse the mortality rate of the teaching corp. However, obtaining such data in Africa is a daunting task even for a well known professional corp like teachers.

Teachers and the Social Vaccine

The situation described above could improve if attention is paid to two main stages in the life of a teacher: (i) his initial and in-service training (ii) his living and working conditions. During initial and in-service training, some adjustments have to be made to the training programme, approach and materials. Besides, innovations and changes have to be made during in-service training sessions. As for their living and working conditions, measures have to be taken to protect and support teachers with respect to the AIDS scourge.

The Social Vaccine During Initial and In-service Training

A recent survey undertaken in Uganda revealed that education is the best way to check the spread of AIDS. A well groomed teaching corps is the best syringe to inject the social vaccine. Most children at school going age are not infected by the virus so they constitute a ray of hope.

There is need to improve the initial and in-service training programmes. According to the UNESCO Higher Education Division, this can be achieved if the following measures are taken:

1. Introducing HIV/AIDS and sex education in school curricula as compulsory and assessible subjects. Distance education must be taken into account for adapted programmes.

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2. Institutionalising professional development, accreditation and advantages granted to young motivated and trustworthy teachers.

3. Improving pedagogic skills (must be children-oriented, participatory, creative, culturally suitable and carried out by peers) based on the children’s attitudes, values and behaviour regarding the risks involved in HIV/AIDS.

4. Systematically providing school needs and easy access to the internet.

5. Providing student teachers adequate knowledge on treatment and psycho-social counselling.

6. Strengthening the capacity of universities in the area of research and pedagogy in relation to behavioural change, teacher training and teaching in general. Strategies on knowledge transfer should be defined from research produced by students for practical use by teachers.

Conditions

With regard to the protection and management of the teaching staff there is need to:

- Review the rules and regulations of the ministries of education on the impact of HIV/AIDS (sick leave, early retirement, replacement).

- Develop strategies on teachers’ access to treatment and advocate for priority to be given to teachers.

- Improve working conditions: adequate wages, regular increments and other incentives.

- Establish data and information friendly system for better management.

- Define programmes in tertiary institutions that can enhance access to information, condoms, voluntary screening; ensure follow up when teachers are affected and address the issue of stigmatization and discrimination.

- Focus on the professionalism of teachers and introduce a system of zero tolerance with respect to the sexual exploitation of students.

To ensure that teachers play an effective role in the fight against HIV/AIDS, the following points must be addressed:

- Advocate for stronger commitment.

- Formulate, encourage and implement policies, strategies and a legal framework on HIV/AIDS.

- Bridge the existing gap between what is taught in schools and in the community and strengthen the relationship.

- Improve the management, follow up and evaluation of staff skills.

- Encourage the gender aspect and the rights of the child.

- Consolidate the networks existing within the sector and between countries.

- Employ people living with HIV/AIDS.

Conclusion

The steady spread of the scourge, despite all the multisectoral efforts deployed, is an obstacle to the achievement of the Education for All and the Millennium Development Goals. The primary role the education system can play to check the spread of the epidemic can’t be over emphasised. However, the impact of HIV/AIDS on demand and supply of teachers and students exposes the loopholes in the education system of many countries. The system which teaches prevention is risky and very often deficient in terms of information, competence and resources to implement school programmes. A coherent education policy on prevention can only be achieved through reviewed capacity building strategies in areas varying from psychosocial consideration to measures on improving the status and working conditions of teachers.

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Workshop on the introduction of ICTs in schools in Senegal: a technopedagogic approach, Dakar, Senegal, 10, 17, 18 November to 8 December 2005

Between November and December 2005, the IICBA Dakar branch organised a series of training workshops on the incorporation of ICTs for secondary school teachers in Dakar. The approach adopted by IICBA was based on the concerns of teachers in the implementation of their programmes to find answers from ICTs. Teachers developed programmes and conducted them to fruition on the basis of the pedagogic and technological knowledge acquired during distance and real classroom training offered by Papa Amadou Sene, officer of the Dakar National Institute for Studies and Action for Development (INEADE) in charge of ICTs.

The project – cyberquest or virtual mission – opted for by most of the participants offered them the opportunity to do an introspective analysis of their teaching and learning practices. For the students, the programme teaches them how to design a project, carry out significant research on the internet and other sources of information which have a link with the ongoing programme. This new approach to pedagogic practice is making progress, judging from the initiatives taken by some teachers to change some of their old teaching habits.

First seminar on shared experiences and the capacity building of stakeholders and teacher training institutions in French Speaking Africa, Dakar, Senegal, 12-16 December 2005

The consortium on teacher training in Africa comprised of ADEA, CIPGL of the Quebec University in Montreal, IICBA and the African Virtual University in collaboration with teacher training institutions in Africa, organised from 12 to 16 December, 2005 the first seminar on shared experiences and capacity building. Forty-three head teachers, teachers and researchers drawn from teacher training institutions in nine French-speaking African countries and three Western countries participated in the meeting on, “The Reform of Primary Teacher Training in Sub-Saharan Africa within the EFA Framework”. At the end of the meeting, the institutions present agreed to work together through a teacher training network in Africa (REFORMA) that will pool together all individual and institutional expertise. It was also agreed to institutionalize the rotation of the meeting every year in a different country. The topic for the next annual meeting is: curriculum for teacher training. The REFORMA network appointed the director of the Koudougou Teacher Training Institution as chairman of the Board for a period of two years.
The Dakar IICBA branch held its last workshop within the context of the 2nd cycle microprogramme and the pedagogic integration of ICTs. The workshop was held in Bamako, Mali. The nine months training co-sponsored by Montreal University was an opportunity for trainers from Mali and Niger to find solutions to local problems plaguing the education system, particularly in the field of training while using ICTs. The workshop ended with a diploma award to participants from Mali and Niger who fulfilled the requirements of the programme. 90% of the candidates went through the programme to the end and each received a certificate. This was a record figure in the area of distance education, particularly in an African context where access to ICTs remains a pipe dream.

Pedagogic Design and ICT workshop for teachers in Senegal and Burkina Faso
Dakar, Senegal, 13-17 February 2006

From 13 to 17 February 2006, the Cheikh Anta Diop University (UCAD) co-organized a workshop with IICBA on pedagogic design and ICTs. The workshop was jointly run by Mr. Patrick Chedvalier from Lille University and facilitators from the Universities of Ouagadougou and Cheikh Anta Diop. The items on the agenda were:

1) How to design training for a particular public
2) How to define pedagogic sequencing which corresponds to a given objective
3) How to generate pedagogic resources

Twenty-eight participants from FASTEF met in the newly refurbished computer hall, equipped with eight computers, two printers and eight undulators offered by IICBA, to participate in the workshop.

First meeting of national coordinators of the UNESCO Initiative for Teacher Training in Sub-Saharan Africa (TTISSA), BREDA, Dakar, 7-9 March 2006

The first meeting of national coordinators for the UNESCO Initiative for Teacher Training in Sub-Saharan Africa was held in the Regional Office for Education in Africa (BREDA) from 7 to 9 March 2006, in Dakar. The meeting was jointly organized by the UNESCO Higher Education Division and the Regional Office for Education in Africa. Aside from the coordinators, several other countries participated in the first phase of the initiative (Angola, Burundi, Burkina Faso, Cape Verde, Central Africa Republic, Chad, Congo, DR Congo, Ethiopia, Ghana, Guinea, Madagascar, Niger, Nigeria, Sierra Leone, Tanzania and Zambia), officials from offices outside UNESCO headquarters serving the above named countries as well as officials from the UNESCO International Institute for Capacity Building (IICBA). The goal of the meeting was to properly organize the work of TISSA and chart a road map for its coordination in each of the 17 countries. Consequently, the role of the 17 national coordinators was clearly defined and their mandates assigned to them.