

CHAPTER 5

LIFELONG LEARNING IN THE AFRICAN CONTEXT: A PRACTICAL EXAMPLE FROM SENEGAL

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CHAPTER SUMMARY

Lifelong learning has been hard to put into practice in an African context on account of the general problems affecting education and training and the obstacle of the digital divide. This article describes an initiative of the School for Librarians, Archivists and Documentation Specialists (*Ecole des Bibliothécaires, Archivistes et Documentalistes*) (EBAD) at Cheikh Anta Diop University in Dakar, Senegal. Through the experience of setting up a distance professional training scheme, EBAD has been able to show how the use of information and communication technologies (ICTs), in close partnership with employers, can widen access to training for employees, combine work with in-service or initial training, better harmonise training and work and make it easier to hire newly qualified staff. At the same time, the effective development of lifelong learning depends on the introduction of a whole series of supportive measures.

INTRODUCTION

The importance of the concept of lifelong learning for the world of the twenty-first century is forcefully stated in a memorandum published by the European Commission (Commission of the European Communities, 2000). The vision of education and training presented therein features a combination of initial and in-service training, formal and non-formal education, self-directed learning, learning through practice and experience and wholly or partly ICT-based distance education designed to benefit learners not just at the level of occupational skills, but also in regard to their own personal development.

That is a hard concept to put into practice in an African context when most countries have yet to achieve the goal of education for all, and when few employees have access to in-service training either because they are ill-informed or on account of their employers' reluctance. It is made all the harder by the digital divide, which represents a significant obstacle now that ICTs form both the subject and the means of lifelong learning: the subject, because ICT skills, for most people, are now basic requirements, and the means,

because of the proliferating use of electronic media and broadband online learning services.¹

We shall not dwell on the general problems of education in Africa, for which solutions have been put forward within the framework of the World Declaration on Education for All adopted in Jomtien (Thailand) and brought up to date in the Framework for Action adopted by the World Education Forum in Dakar (Senegal) in 2000. The digital divide, on the other hand, warrants some clarification on account of its multidimensional nature.

THE DIGITAL DIVIDE IN AFRICA

Access to ICTs in Africa is, according to the ITU Digital Access Index, very low (International Telecommunications Union, 2003). The Republic of Seychelles is the only African nation in the upper access category, and all but a handful of the rest have a low level of ICT access.

Teledensity stands at around 5.2 telephones per 100 inhabitants, the percentage of households with a computer is even lower, and very few have access to the Internet. International Internet bandwidth is often limited to a few Mbps, specialised digital links tend to be very slow and ADSL is only available in a handful of countries. Added to that, access subscriptions and telecommunications rates tend to be quite costly.

Furthermore, the geographical distribution of telecommunications infrastructure is uneven: 67 per cent of fixed telephone lines in Senegal, for example, are concentrated in the capital, and a mere 1000 of the country's 14,200 villages have telephone connections.²

The digital divide also encompasses the social divide: 56 per cent of the population in Africa were living below the absolute poverty line in 2004,³ so it is not hard to imagine that none but the privileged few having access to ICTs.

The digital divide also stems from the high levels of illiteracy affecting some 40 per cent of the population aged 15 and over, close to 49 per cent of whom are women.⁴

And it is a gender divide too in that the majority of those suffering from digital illiteracy are women (Regentic, 2004).

Finally, the digital divide has a linguistic dimension given the near-total absence of African languages on the Web; the fact that the bulk of the information available is in English is a drawback for non-English-speaking people.

OUTLINE OF A SUPPORT SYSTEM

The digital divide has also had an impact on the world of education, although it must be said that the international community is doing a great deal to bring ICTs into schools. The World Bank, through the World Links programme,⁵ is providing computer equipment, promoting school Internet connectivity and training teachers in more than 35 countries. It is also contributing to lifelong learning through the short courses on offer at the distance learning centres set up within the framework of its Global Development Learning Network (GDLN).⁶

The Réseau d'Appui Francophone pour l'Adaptation et le Développement des Technologies de l'Information et de la Communication dans l'Éducation (RESAFAD), a network of French-language support for the adaptation and development of ICTs in

education, which was initiated by *Coopération Française*, is present in Benin, Burkina Faso, Equatorial Guinea, Guinea, Mali, Mauritania, Senegal and Togo.⁷ Multimedia resource centres providing Internet access, classrooms and space for the creation of educational resources have been set up in those countries' capital cities; in-service teacher-training portals have been created in Burkina Faso, Senegal and Togo.

There have been two major initiatives in higher education: the African Virtual University (AVU) project funded by the World Bank⁸ and the French-language digital campuses (CNFs) developed by *Agence Universitaire de la Francophonie* (AUF). AVU, with sites in around 20 countries, essentially offers short certificate courses. AUF and its CNFs enable database and Internet access, content creation and face-to-face and online follow-up for distance certificate and diploma courses respectively.⁹

Finally, after the World Summit on the Information Society (WSIS) in Geneva (Switzerland) in December 2003, UNESCO, in collaboration with the Swiss Agency for Development and Cooperation (SADC), decided to create 150 Community Multimedia Centres (CMCs) in Mali, Mozambique and Senegal. These centres are designed mainly for people in the rural areas generally left out of the training loop. Combining community radio with telephone, fax and Internet facilities, CMCs serve a dual purpose as both information and learning centres.

Such initiatives are crucial to the development of lifelong learning, for it is fanciful to believe that the latter can materialise in Africa unless there are the facilities to provide the necessary technical capacity and a suitable framework for learning activities. Cybercafés are often put forward as a possible alternative, but they rarely fit the bill due to a frequent lack of the required hardware and software configurations for distance learning tools, their limited bandwidth shared by crowds of users, their relatively high hourly connection rates, and, above all, an atmosphere that tends not to be too conducive to learning.

MAKING LEARNING COMPATIBLE WITH WORK

Such was the context within which the School of Librarians, Archivists and Documentation Specialists (EBAD) at Cheikh Anta Diop University launched its distance education project.¹⁰ As EBAD used to be the only information science school in French-speaking Africa – training both technical staff and managers for libraries, archives and information services – a large proportion of its students through to the early 1990s came from abroad: 30 to 40 per cent on first cycle courses and close to 50 per cent in the final honours year. Over time, however, the number of foreign students dwindled, leading to a reduction in overall class sizes and a gradual erosion of the school's sub-regional function. There are many reasons for the falling numbers of foreign students. First and foremost, under the impact of structural adjustment policies (SAPs), African state grants for studying abroad were slashed and even abolished, public service recruitment was suspended and the chances of securing training leave diminished.

Enrolments fell still further as information science courses began appearing in countries such as Benin, Cameroon, Côte d'Ivoire and even Niger. And finally the devaluation of the CFA franc¹¹ in January 1994 seriously stemmed the flow of African students going to EBAD, especially for final honours degrees.¹²

As a result, many students specialising in the information sciences and finding it impossible to gain access to the final honours level ended up switching to other areas of activity, while those unable or unwilling to change track were left facing social and professional stagnation. For want of any action to reverse the trend, there was a great

danger of the profession's demise due to the loss of its best elements and the paralysis of the rest in a field in the throes of in-depth upheavals on account of an increasingly intensive use of ICTs and the new dynamic linked to the emergence of the information society.

In 1999, when EBAD was seeking solutions to the problem, the French Government launched the PROCOOPTIC Programme to promote ICTs in Africa, whose components included the 'Formations Continues en Informations Informatisées en Réseau' (FORCIIR) a project for continuing education in computerised networked information. Its aims were, *inter alia*, to upgrade the old African information science school diplomas, to recruit information mediators, to produce information products and to boost the presence of the French language on the Web. Such ends would be achieved by creating distance learning modules for initial and in-service training, providing the information science schools with support to help them modernise and for teacher training, and building partnerships with private-sector businesses, local authorities and associations.

In February 2000, after a series of meetings between EBAD and the French Ministry of Foreign Affairs, a co-operation agreement worth just over €1 million over three years was signed between the French Embassy in Senegal and Cheikh Anta Diop University. The initial phase focused on capacity building: equipping EBAD with information science books, subscriptions to databases and access to the Internet, establishment of a local network, installing IT equipment¹³ in the library, the administrative offices, the teachers' offices and classrooms, training teachers and so on.¹⁴

One of the project's first fruits was the finalising of the curriculum reform that had been ongoing since 1997, and which was ready for implementation as early as at the start of the 2000-2001 academic year. Changes had been made not just in the educational content but also in the methods of knowledge assessment. End-of-year examinations were replaced by continuous testing, and an emphasis was placed on working in groups and studying at home.

The project's implementation also led to in-depth changes in the conditions, content and methods of face-to-face tuition, reaffirming the view that "distance education, because of its unique properties, can be subjected to essential methodological clarification, the primary benefactor of which, in return, would be face-to-face tuition" (Péraya, 1994).

After designing a distance education platform and producing a CD-ROM learner's guide,¹⁵ attention turned to enrolment. Over and above the usual admissions requirements, access to training courses was limited to working professionals because students had to be able to afford to pay the relatively high tuition fees,¹⁶ and to have an Internet-connected computer.

In addition to individual take-up of course content, this new environment also saw benefits emanating from discussions in the "virtual classroom". Those exchanges were vitally important given how the sense of isolation often felt within the framework of distance education can, as a number of studies have shown, drive learners to despondency or even to giving up altogether (Sauvé and Viau, 2002). The virtual classroom was an invaluable arena for various forms of dialogue between EBAD managers, teachers and learners using various means such as e-mail, discussion lists or even discussion forums. Through these different means, there were three types of exchanges, all of them mutually complementary and each with its own particular purpose, i.e. exchanges between:

- the administration and learners;
- the teachers and learners;
- the learners themselves.

So the virtual classroom acted as an arena for exchange, enhancement and learning. It was also a place of mutual support and sharing, a framework within which learners could pass on their experiences, describe the difficulties and sources of satisfaction they had encountered, seek advice for problem-solving, and express their views on all manner of issues pertaining to their training or social lives. The virtual classroom helped to confirm the introduction of a fourth pole – the group – into the conventional three-way educational relationship between the teacher, the learner and the subject matter, which characterises face-to-face tuition (Faerber, 2002).

One of the project's major breakthroughs was the introduction of a virtual training course designed to replace the face-to-face courses that students were used to taking under the supervision of a professional. It was hard to imagine asking distance learners taking courses while continuing to work to leave their workplace for two months. The virtual training course, therefore, put learners in touch with supervisors working for training establishments that had a Web site, and under whose guidance they carried out a number of assignments. Over the space of three months – split into two periods of one and two months respectively – learners were required to search for information online, to process documents using IT tools, produce an electronic information product, assess the performance of the host establishment's Web site, and suggest ways of fixing its weak points.

Finally, learner evaluations took place entirely at a distance. The system's weakness, however, resided in the fact that learners were not subjected to any sort of monitoring to check either their identity to ensure that they really were the individuals evaluated and not a third party; or even whether their working conditions really did comply with the educational ground rules. Meanwhile, end-of-course dissertations were delivered at EBAD, meaning that learners not living in Senegal had to travel there at their own expense.

LEARNING WHILE WORKING, WORKING WHILE LEARNING

At the same time, EBAD launched a six-month distance learning certificate course for business e-archivists and documentation specialists. The main aim was to provide professional training designed to help masters graduates enter the labour market; a secondary aim was to meet the growing demand in that market for trained individuals equipped with knowledge of a particular field and technical skills in information resource management (Michel, 2003).

To ensure that the course would be genuinely in sync with the labour market, an emphasis was placed from the start on private-sector partnership. Accordingly, the project was presented to company directors and association managers to see how they felt about the opportunities and usefulness of such a course. Their feedback confirmed that it met a genuine need, and the ensuing exchanges helped reduce the frequently noted discrepancy between the scope of information workers' skills and how they were perceived by company directors (Thiolon, 2003).

After some awareness-raising work, the project recontacted some 50 private and public-sector companies, non-governmental organisations, local authorities and associations. The object of the exercise was to present the content of the three-sided agreement binding the learner, EBAD and the host establishment, the idea being to create a genuine partnership in which each side could see that they really did stand to gain from working together with the others. The various obligations were as follows:

- The company would provide the learner with a computer and Internet access for at least two hours a day to enable him/her on the one hand to use ICTs on a daily basis and, on the other, to follow classes on the distance learning platform.
- EBAD would teach the learner and find him/her a host establishment for the duration of the course.
- Learners would pay a tuition fee of 240,000 CFA francs and work for their host establishment for the duration of the course.

With respect to the face-to-face tuition, this arrangement would work to each party's advantage:

- The company would have the services of an information worker for six months without having to pay any extra wage costs or being under any obligation to hire the worker once the course was over.
- EBAD would generate extra financial resources thanks to the tuition fees, and could improve the quality of training by strengthening the practical side.
- Learners would have the chance to become acquainted with the realities of the world of work for the duration of the course, to put what they learnt into practice immediately, and, ironically, to enjoy close and personalised supervision by tutors via communication tools (telephone, discussion forums, e-mail, etc.) and field visits.

Of the 50 or so potential partners contacted, 19 establishments (public and private companies, associations, schools, international organisations and state bodies) agreed to take part in the experiment. EBAD then proceeded to enrol 20 of the 30 prospective learners who had submitted an application form.¹⁷

The course began in December 2001 with the learners attending a ten-day group seminar at EBAD designed to brief them on the host establishment's organisation and working procedures, to teach them the documentary techniques needed to become operational as fast as possible; and to give them a grounding in ICTs so that they could use those technologies as media for learning and communicating with EBAD tutors and as work tools for information resource management as soon as they were settled in at the host establishment.

After the group seminar ended, the learners were despatched straight to their respective host establishments where they were able to continue the course and immediately put what they had learnt into practice. During this phase, beyond exchanges in the virtual classroom, course tutors visited them in the field to check up on their learning conditions and what problems they were having.

After four months in the field, the learners returned to EBAD for a mid-course group session. Among other things, this session served to take stock of progress and to teach trainees the methodology they would need to draft a feasibility study to be presented to the host establishment at the end of the course.

Learner evaluation took place within the framework of examinations held in the EBAD premises, distance testing and a public dissertation presenting a documentary project together with a course report,¹⁸ the latter before a jury of EBAD tutors, representatives from the host establishment and teachers from the National Institute of Documentation Techniques (*Institut National des Techniques de la Documentation*).¹⁹ What was new at this level was the inclusion on the jury of people from the world of work, which enabled the dissertations to take professional concerns into account and to become more than just an academic exercise in style.

In June 2002, when the course came to an end, 17 of the 20 learners originally enrolled were awarded a business certificate as e-archivist/documentation specialists – an 85 per cent success rate. This in itself was hardly unusual at EBAD, because both first and second-cycle success rates there generally came to over 90 per cent. While EBAD graduates have been known to go years without finding a job, however, 14 of the 17 certificate holders emerging from this course were hired by the establishments where they had been placed for their training.

Drawing on the success of this experiment, in June 2003 the Higher Institute of Communication, Business and Management (*Institut Supérieur de la Communication, des Affaires et du Management*) in Antananarivo, Madagascar, launched an information management certificate. The following October saw the start-up of a business information and document management course at the Advanced School for the Science and Technology of Information and Communication (*École Supérieure des Sciences et Techniques de l'Information et de la Communication*) in Yaoundé, Cameroon. And the School of Information Sciences (*Ecole des Sciences de l'Information*) in Rabat, Morocco, decided to introduce four new certificate courses in information processing, archive management, information technologies and information management.²⁰ Sadly, for want not just of the necessary human and financial resources, but also, and above all, of the contacts needed to establish appropriate partnerships with the information science schools of English-speaking Africa, the reach of these courses is confined to the French-speaking world. Ultimately, though, it would be interesting to set up a consortium to produce a combined French- and English-language course. With lessons delivered partly in French and partly in English, such a course could help foster mutual understanding if not full-fledged bilingualism. Better still, graduates, no longer confined to a language zone, would have greater mobility in Africa; course content would be improved through drawing on a broader pool of teachers; and the course itself would be economically stronger by being able to target a wider market.

CONCLUSION

This kind of experience, combining a certificate course with work experience and the utilisation of ICTs, is relatively new to the French-speaking world and resembles the German block release system, known in French as the *système dualiste* (dual system). Demonstrating that continuing education and even initial training can be made compatible with work, it amounts to an interesting means of putting the concept of lifelong learning into practice in that it helps combine training with work. This system has opened up new horizons for the many information workers for whom the future in terms of their career and personal development prospects had previously seemed bleak. Without needing to stop work or leave their families for a long and costly stay abroad, they have been able to capitalise on a training course allowing them to close the gradually expanding gulf between the skills acquired during their initial training and the new needs emerging over time on account of the changes in their socio-professional environment. The use of distance learning has therefore enabled those taking part to strike a balance between the demands of their working lives, private lives and training, which is seldom possible within the conventional systems that often require one of those three elements to be sacrificed. Furthermore, the fact that this course calls for a fairly intensive use of ICTs ultimately helps prepare them better to meet the new demands of their professional environment and enables them to use those technologies to continually renew their knowledge by tapping into the resources available online. Finally, for those on initial training courses, the combination of business immersion and distance training has helped foster a better balance between training and work, and has enabled them to quickly

find a job. It must be said, however, that it is not easy to put lifelong learning – via the medium of ICTs, no less – into practice in an African context. But given the advantages it offers for individuals, for businesses and for society as a whole, efforts must be made to encourage its development, which will inevitably involve the introduction of special measures.

POLICY CONSIDERATIONS

- ***Create local training centres***

Efforts must be made to encourage the creation of local training centres that are suitably equipped with IT hardware and broadband Internet access, whose opening times fit in with employees' working hours, and that charge affordable admission fees. Apart from delivering ICT and ICT-based training, such centres could also serve as a community's portal to the Internet.

- ***Promote adult education and training***

It is important to carry out awareness-raising campaigns that target training centres, to encourage them to develop adult training courses; businesses, so that they allow their employees to take courses while continuing to work; and adults, to make them see the importance of upgrading and acquiring new knowledge.

- ***Enhance research on experience validation***

Experience validation is a new concept whose mechanisms are complicated to implement. Since Africa has no experience whatsoever in this field, it is necessary to build the required capacity by promoting training and research centred on this new body of problems.

- ***Encourage the development of short certificate training modules***

The e-archivist-researcher certificate has shown that a short certificate course with, *inter alia*, an ICT component, can help general higher education graduates easily find a job. Increasing numbers of these kinds of courses, in tandem with previous experience, definitely could be of benefit to people seeking work or an opportunity to retrain.

- ***Foster partnerships between the worlds of business and training***

The EBAD experiment has shown how partnership between businesses and the world of training can enable the use of a company's resources for training (computers in the workplace, virtual training courses, etc.) and, in return, provide the company with better-trained human resources already acquainted with the world of work and quicker to employ.

RELEVANT INTERNET SITES

FORCIIR project:

www.ebad.ucad.sn/forciiir/

Site with information on lifelong learning:

www.educnet.education.fr/dossier/eformation/vie.htm

EBAD distance education courses:

www.ebad.ucad.sn/acces_dedies/ufadis/portail.htm

AUF French-speaking digital campuses:

www.refer.org/

AUF distance education courses:

<http://foad.refer.org/>

Community multimedia centres:

www.unesco.org/webworld/cmc

World Bank's Global Development Learning Network (GDLN):

www.gdln.org/

RESAFAD network:

www.resafad.net/

African Virtual University:

www.avu.org/default.asp

World Links:

www.world-links.org/

Internet in Africa:

www.aedev.org/article.php3?id_article=69

Site with information struggle against the digital divide:

www.dsf-fsn.org/

Site with information non-formal education via ICTs:

http://portal.unesco.org/education/fr/ev.php-URL_ID=30233&URL_DO=DO_TOPIC&URL_SECTION=201.html

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Notes

1. For some, broadband means connection via cable, ADSL and other technologies at speeds starting at 512 kilobits per second (kbps) and over; for others it means speeds that start at 1 or even 2 megabits per second (Mbps).
2. Republic of Sénégal. Lettre de politique sectorielle: Secteur des télécommunications. January 2005
3. The absolute poverty line stands at US \$1 per person per day.
4. Source: UNESCO Institute of Statistics, September 2004
5. World Links: www.world-links.org/
6. GDLN: www.gdln.org/
7. RESAFAD: www.resafad.net/
8. AVU is now an NGO based in Nairobi (Kenya).
9. AUF catalogue of online courses (French only): <http://foad.refer.org/>
10. EBAD first emerged as an institute at Dakar University in 1967, taking over from the Centre régional de formation des bibliothécaires de langue française (CRFB), which operated in Dakar, with UNESCO's support, from 1963 to 1967. It subsequently went on to perform a subregional function, drawing students from sub-Saharan countries from Cape Verde to Madagascar.

11. The approximate rate for 1€ was 655, 957 CFA Franc in the spring of 2005.
12. Some years – 1999-2000 or 2002-2003, for instance – there was not a single foreign final honours student enrolled.
13. In the framework of this project a local network consisting of 54 connections was installed. In addition, an effort was made to install computer equipment: to install one computer in every teacher's office; one computer in every administrative office; to equip a computer room for students with 10 computers; and to install 5 computers in the library for online and offline documentary research.
14. The FORCIIR Project has funded a variety of courses for training EBAD teachers in the use of tools such as PowerPoint or in electronic resource design, project management, time management and even change management.
15. The learner's guide divides into four parts containing course plans, lesson and assessment schedules, data on every learner and a toolbox of software, plug-ins, tips and so on.
16. Every learner must pay a share of the admission fees at Université Cheikh Anta Diop de Dakar, i.e. 5000 CFA francs for Senegalese citizens and 300,000 CFA francs for foreign students, plus 450,000 CFA francs in tuition fees for all learners regardless of nationality.
17. The candidates selected each had a master's degree and had been looking for their first job for more than three years.
18. The courses had a coefficient of 1, while the project had a coefficient of 2.
19. INTD is a French institution specialising in training information science workers and involved in co-operative activities with EBAD.
20. All four of the ESI courses last eight months, not six.

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