

# The Moroccan experience in E-learning in the Ecole des Sciences de l' Information

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**Abstract**— The objective of this paper is to present the experience of the ESI in distance learning. Certainly, no one can ignore today the impact of the technologies of information and communication on human training. Conscious of the interest of these new technologies in the field of education, ESI which has for about thirty years been providing in-house training in information science, has initiated a distance learning program in 2004, and proposes online certifying and paying courses. These courses are part of the FORCIIR project, which is initiated by the French Ministry of Foreign Affairs.

**Index Terms**— E-learning, E-learning System, ESI, FORCIIR

## I. INTRODUCTION

Created in 1974, the School of the Information Science of Rabat "ESI" is an establishment of higher education which depends on the "Haut Commissariat au Plan". It is the unique school to Morocco which trains information professionals called "informatistes" specialized in the field of libraries, documentation centres, archives and records management centres [6].

The informatistes trained at the ESI play a major role within the administrations, the public, semi-public and private corporations. They assure the collection, the treatment, the storage and the diffusion of information and help decision-makers while placing at their disposal the information they need.

Facing the technological mutations of the sector of the information-documentation, ESI plays a leading role as it trains highly qualified information professionals to occupy the function of interface between the users of information and the multitude of banks and accessible data bases via the information superhighways. This role of leader also results in research works aiming to promote the sector of information, and hence, the economic and social development of the country. The formation is dispensed there in two cycles that are represented in the following figure

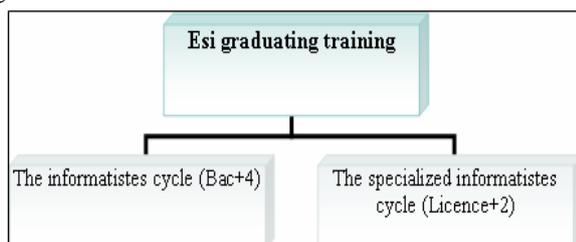


Figure 1. Esi graduating training

ESI, while continuing to train the librarians, documentalists and archivists whom the country needs, integrates in its training programs new profiles specialized in the conception and the management of information systems.

The formation in the graduate cycle of the ESI aims to train 4 types of profiles represented in the following figure:

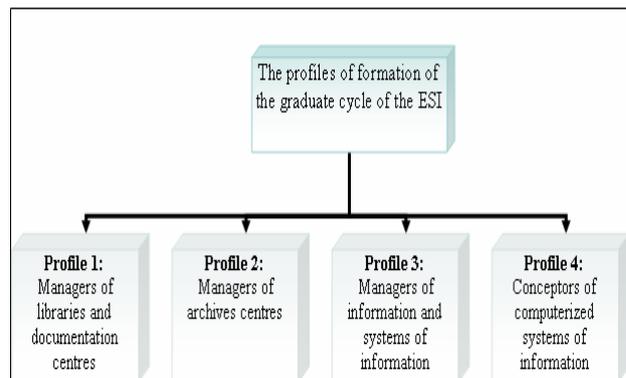


Figure 2. The profiles of formation in the graduate cycle of the ESI.

The ESI grants a particular interest to the continuing education that allows the information professionals to update their knowledge and their expertises in a field in perpetual mutation. It thus offers continuous and retraining education in several fields.

The following figure (Figure 3) shows the axes that the ESI offers in the continuous training:

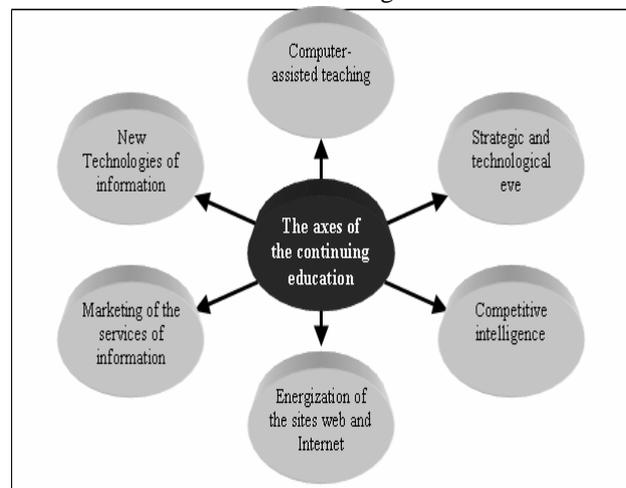


Figure 3. The training profiles of the graduate cycle of the ESI

The Esi completes this panoply of choice of formations by a distance education program [7]. Four certificates are proposed, represented in the following figure (Figure 4):

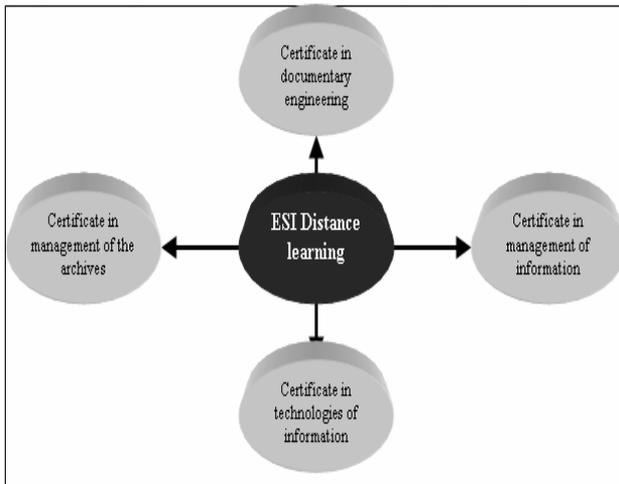


Figure 4. The Distance learning certificates of ESI

As part of its training programs, ESI offers four distance learning certificates (figure 4). The abbreviations of these certificates are as follows:

TABLE I. THE ABBREVIATIONS OF THE CERTIFICATES OF THE ESI

Abbreviation	Complete name of the certificate
<b>CID</b>	Certificate in documentary engineering
<b>CGA</b>	Certificate in management of the archives
<b>CTI</b>	Certificate in technologies of information
<b>CMI</b>	Certificate in management of information

The courses foreseen in these certificates are also offered in an isolated way, if the number of participants by course permits it. These courses are cumulative to get the corresponding certificate. The completion of six isolated courses chosen from two, three or four different certificates implies the obtention of a Certificate in sciences and technologies of information.

By this paying continuing education, the ESI aims to contribute to: "The acceleration of the integration of Morocco in the society of information; "The setting to informational level of the Moroccan enterprise facing the challenges of internationalization; "The modernization of the Moroccan administration, by a rational management of information for the management and the decision making and by the use intense of the TWITCH; "The insertion of the unemployed graduates in the active life by their recon version in the field of information management and the TWITCH

## II. THE E-LEARNING

The marriage of the data processing and telecommunications in the field of education allows abolishing distances, to have expertises apart from national and to facilitate the access to knowledge. Indeed, the arrival of data processing in the world of the communications permitted to attend the educational needs of distance learning students [9] [10]. Distance learning is a teaching followed without the physical presence of teacher. It is defined like a family of educational methods

where the teaching is achieved separately of the training and covers the different shapes of survey without continuous and immediate supervision with the students [1] [2]. It adapts to the demand, to the preferences and to the needs of distance learners, not only because of its possibilities of flexibility, but also because of the big liberty of choice. It proposes for it a planning and a guidance of the teaching institution. Distance teaching allows the learners to learn where they are, at home or at work [11]. With the apparition of the new technologies distance learning applies to students of all levels. It addresses either to people who already practise a profession and want to improve (continuing education), or to those that form themselves in a specialty (graduating education)[12]. The following figure (figure 5) shows the different actors of distance learning:

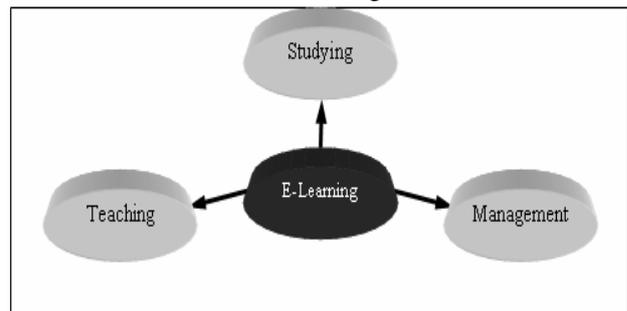


Figure 5. The actors of distance learning.

Five technological parameters claim their place in the present teaching, notably to the superior levels and in continuing education: digitalization, information, communication, hypertextualité and interactivity. Among the advantages of distance learning are the following:

TABLE II. THE ADVANTAGES OF THE E-LEARNING

Studying	Teaching	Management
To work to one's own rhythm	To avoid the displacements	To save the reorientations
To choose the time of works (Evening, Morning,..)	To encourage the excellence of the teachings	To facilitate the reorientations
To avoid the displacements	To be relieved by a guardian	
To be accompanied by a guardian	New approach of the teaching	
To form oneself		
To evaluate oneself		
New approach of the teaching		
Psychological availability.		

It is to note that these distance formations which have already proven their efficiency in advanced countries, offer certain advantages [13] [14]:

- They don't require the physical presence at the ESI of the learners that lives far from Rabat, allowing them thus to save the expenses of stay and the annoyances of the displacement far from their family;
- They allow those that work to study during their spare hours without leaving their work, while making their enterprise and administration save the expenses of displacement and stay;
- They offer to the learners the possibility to form themselves at their own rhythm and at the time that best fit them.

### III. THE PROJECT FORCIIR/ESI

The project "Continuing Education in Computerized Information in Network" (FORCIIR/ESI) is a component of the Cooperation Program for the Development of New Technologies of Information and Communication (PROCOOPTIC) of the French Ministry of Foreign Affairs. Of an amount of 2 millions of Dirhams, the FORCIIR/ESI project has for objective the development of the teaching of the new technologies of information and communication (NTIC) in the schools of information science in Africa. In a first phase, the project aims to put paying certifying continuing educations in place via Internet and focuses on the following fields:

- "The documentary engineering;
- "The records management;
- "The management of information;
- "The TWITCH.

The FORCIIR project is based in the school of the Librarians, Archivists and Documentalists of Dakar [4], which is part of Sheik Anta Diop University [18]. That project already offers a certifying formation for graduates in whatever field of specialty, who want to update their knowledge and acquire a new expertise in information science and technology. The dispensed formation aims at:

- Allowing students to acquire new know-how on the taught specialties;
- Endowing young graduates in search of job with a complement of formation allowing them to be more competitive in the organizations
- Making more effective those who already work.

On the educational plan, the training is done by:

- An individual appropriation of the contents;
- A group meeting before starting the training;
- The exchange within the virtual class;
- The use of the forum and the chat as a means of tutorial by the teachers.

With regard to the length of the formation, it is fixed to four months by certificate. The expenses amount to 5000 Dh for a certificate of 6 courses or 1000 Dhs for an isolated course. Assessments are programmed via the Internet, as well as in situ.

### IV. THE CERTIFICATES OF THE PROJECT FORCIIR/ESI

Four certificates are programmed:

#### A. Certificate in documentary engineering (CID)

This certificate allows the learners to know the roles and the functions of a service of information/documentation, the activities that must be led there and the sources of information; to assure the documentary treatment; to develop a marketing strategy of the services of information/documentation and to use software of treatment and management of the documents. The courses of this certificate are presented in the following figure:

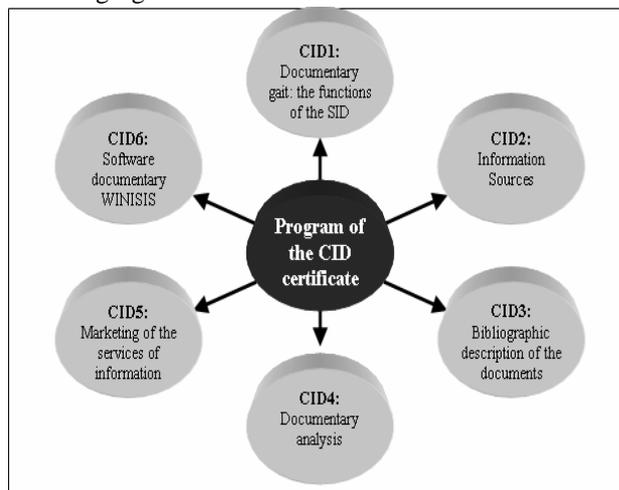


Figure 6. The courses of the Certificate CID.

#### B. Certificate in management of the archives (CGA)

This certificate permits to endow the learners of the knowledge and expertises required for the manual and automated management of the administrative documents and the electronic and classic archives for the needs of decision making and retrospective research. The courses of this certificate are presented in the following figure:

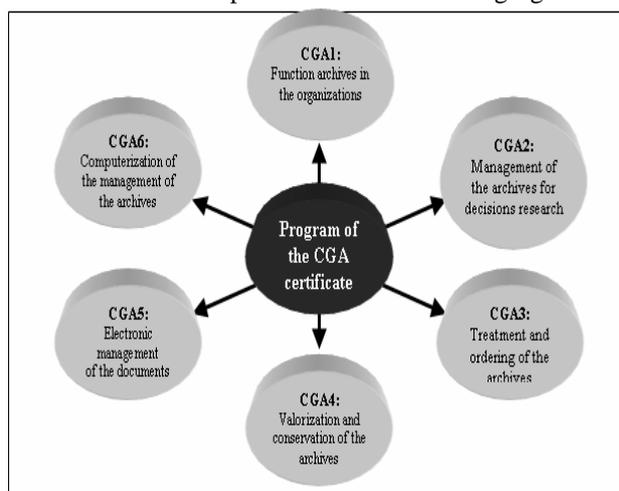


Figure 7. The courses of the Certificate CGA.

#### C. Certificate in technologies of information (CTI)

This certificate aims the deepening of the knowledge and the development of expertises concerning technologies of information. The learners are going to acquire the necessary ability in the domains of the office

automation, the data bases and the Internet technology. Currently, I am the person responsible of this certificate in that second session [16] [17].

The courses of this certificate are presented in the following figure:

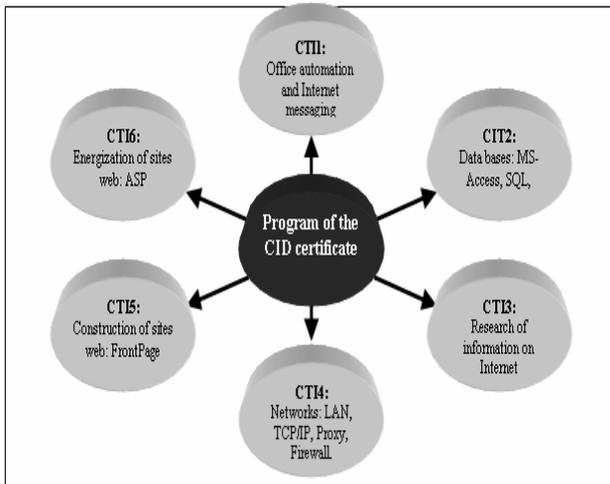


Figure 8. The courses of the Certificate CTI

**D. Certificate in management of information**

This certificate permits to acquire the knowledge concerning methods of management of information. The participants are going to acquire expertises in term of use of the techniques and tools of selection, treatment and communication of information within an organism. The courses of this certificate are presented in the following figure:

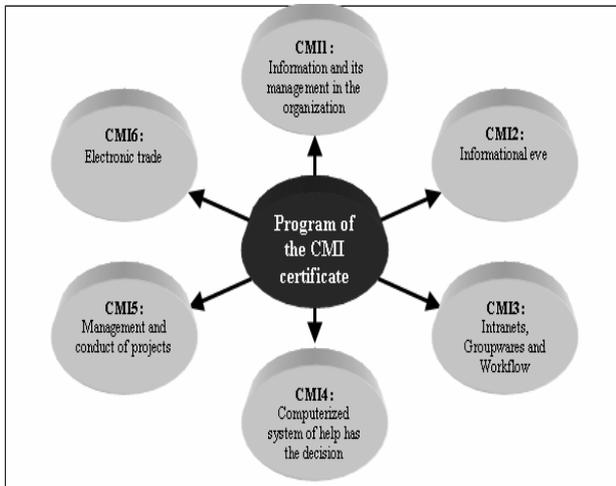


Figure 9. The courses of the Certificate CMI.

With regard to the technical platform the software adopted is LOTUS IBM Learning Space teaching platform [8]. This product permits the dispensation of teachings on Internet, as modules consisting of a library delivering all types of multimedia documents (duplicated and various texts, slide shows, pictures and sounds), a forum (virtual class room), an electronic mail (joining students and teachers) as well as of a self-evaluation module for on line exam [19]. This tool is especially adapted to the training by problems and by QCM.

**V. CONCLUSION**

The teaching permits to optimize the human resources and contributes to the opening of the university on its national and international environment. It allows Morocco to be in tune with new mutations in the field of education. It pushed the setting up of a Moroccan virtual campus on the basis of the experiences of the Moroccan universities and in the light of the experiences of foreign universities. Our collaboration as actors of the higher education in Morocco has been concretized by the project of Continuing education in Computerized Information in Network (FORCIIR). It had for objective the development of the teaching of the new technologies in Information science schools in Africa.. Our collaboration also encompassed the shutter searches on distance learning [15] in order to model and implement a system of distance learning through the mechanism of filtering.

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