

First E-learning Degree in Egypt Sees the Light: Case Study

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Abstract

Alexandria University created the first e-degree online in Egypt by the Faculty of Science, a master degree in Neurobiology. The project launched in December 2008 with the support of the AUF (the Agency of French-speaking Universities). The study started in October 2009. This paper shares the experience of the pioneer program in the country with an emphasis on the major role played by the AUF. We will discuss the efforts employed, the challenges faced, implementation and continuous improvements to be made in the future.

1. Establishing an e-learning degree in Egypt

In this section, we will introduce the Neurobiology program, the support it benefits from, and the challenges faced, then we will see the opportunities of other Egyptian institutions to create similar programs. As the only two e-learning degrees offered in Egypt were created by the AUF support, the next section will be dedicated to the areas of support it offers to e-learning programs. As to the third section, it will analyze the quality of e-programs as well as the support offered, with focus on developing countries. To conclude, general ideas and improvements will be suggested.

Each section will be accompanied with statistics output from two surveys, SurveyI, filled by peers from different e-learning programs in Middle East & North Africa, Sub-Saharan Africa and Europe. Eighteen participants shared their experience with the students from same target countries and the same supporting agency, the AUF. The other one, SurveyII, was exclusive to staff members from Egyptian universities.

1.1. The idea, how it arose

“Neurobiology” is an academic master degree offered by the Faculty of Science, Alexandria University in collaboration with Bordeaux II University (3 semesters of online courses and 1 semester of practical work in local laboratory or relevant institution) targeting all French-speaking countries. In the first year, 42 applicants from 19 countries applied, and 15 students were finally admitted. The second started in January 2010 is a professional master degree in “Enterprise Management” offered by the Faculty of Commerce, Alexandria University in collaboration with Poitiers University targeting all French-speaking applicants from MENA region, 372 applicants from 35 countries applied and 20 students were finally admitted [1].

The two programs were created as response to the call of proposals offered by the AUF that officially started its support in December 2008.

Neurobiology team is composed of academic advisors, course creators, tutors,

academic coordinator from each university and administrative coordinator. Most of team members are Egyptians; there are few members from Algeria, Morocco and France. Most of the team had training on how to use the educational platform and how to transform their course into an electronic course. As agreed in this program, most of the course creators assume tutoring tasks; they also took training in online tutoring.

1.2. Challenges of developing an online degree

Course creators had difficulties transitioning their courses from teaching to learning approach and from electronic format to electronic learning.

Among the most challenging phases of the program's development was obtaining the authorization of the Ministry of Higher Education, and explaining the principles of e-learning program to the superiors. The regulatory and statutory guidelines had to be redone several times as the procedures were not easily understood and technical terms concerning e-learning programs were not clear enough for the superiors. The two programs, as several programs in other countries (44% of the participants in SurveyI), are still not well integrated in the certifying institutions and depend on individuals.

One of the other challenges faced by the Egyptian programs was the misperception of a project held in a developing country and supported by a developed country. The superiors believe that a project supported from an organization in a European country should be profitable or economically feasible.

Egyptian Universities receive a great number of students from several African and Asian countries each year who are interested in various disciplines, and a lower number of students from Western countries who come to study specific courses on language, history or culture. In fact, African and Asian countries send students to Egypt to educate greater number of students with lower fees if compared to tuition fees of a university in a Western country. Egyptian universities set higher tuition fees for international students than for local students being in this situation "A house of expertise".

1.3. E-learning tuition fees and program costs

To set tuition fees for the Neurobiology program, rates of different services offered by the personnel were calculated with only 15% for the treasury of the university and the certifying faculty instead of 52% as in in-class master degrees, without any addition of taxation or benefits. Then total costs were divided into a number of 15, 20, 25 and 30 students. This made an e-learning degree offered in Egypt to international students much less expensive than in-class programs.

In a meeting organized by Alexandria University with the ambassadors of African countries "Alexandria University at the service of Africa", the Nigerian ambassador in his speech expressed some resentment toward the actual regulations adopted by Egyptian institutions vis-à-vis students from African countries. He addressed two main subjects, one of them is that African students are charged higher tuition fees than Egyptian students while as he and as ambassadors of other countries believe, they are supposed to get a reduction being citizens of less developing countries.

It would be appropriate to mention that the AUF played a remarkable role during the signature of the agreement with Alexandria University, and convinced the "superiors" while discussing the tuition fees that this is the time to have a more powerful role in helping sister less developing African countries.

Therefore, the two e-learning programs are considered among the pioneer programs that aim to contribute efficiently in developing African countries through "south-south cooperation".

1.4. Opportunities to develop other e-learning programs in Egypt

Participants in SurveyII were asked to select the reasons for which an Egyptian institution should develop an e-learning program. Egyptian staff members believe that it is mainly a solution for limited availability of classrooms, students who cannot afford displacement from other cities or others countries, and professional applicants. Lower significance was assigned to considering e-degrees a good solution for female international students, from Gulf Area for example. For cultural reasons many Arab families are not comfortable with letting their daughters spend several years abroad to get a degree. Other reasons were mentioned like problems or international crisis as HIN1, or difficulties of getting visa for Egypt.

We may believe that e-learning may be a partial remedy for the other issue faced by international students in Egyptian universities and addressed in "Alexandria University at the service of Africa" meeting, that is the rigid bureaucracy of the security check followed to offer international students a legitimate status. The administrative procedure is lengthy and may end by declining some students after being admitted in the university, spending about one semester of courses and paying non-refundable one-year tuition fees.

Although e-learning seems a good solution for different current problems in Egypt, the fact that there are only two e-learning degrees offered, indicates that there is a problem adopting this solution.

Participants in SurveyII were also asked about the current difficulties of establishing an e-learning program in their Egyptian institutions and whether they know about the two online master degrees offered by Alexandria University, about 75% do not.

46.15% believe that e-learning is underestimated among potential students. 38.46% think that developing or designing an e-learning platform is difficult. 30.76% are suspicious about the possibility of verifying certificates and/or ID of distant students, and 25% think that cultural exchange may be restrained. Other reasons mentioned with lower percentages are that their courses cannot be offered online, tuition fees will be reduced, and IT skills are poor.

91.6% of the participants of the same survey mentioned that if the difficulties of establishing an e-learning program in Egypt will be solved they will be glad to work on a similar program as project manager, course designer, tutor or academic advisor.

Egyptian staff members who attended training in e-learning technologies offered by the AUF, do not think about the difficulties expressed by the participants of SurveyII, as they knew how they are overcome by the support of the AUF. They even enthusiastically ask about the opportunity of their institution to develop such programs. Unfortunately, their enthusiasm fades quickly when they realize that this support is currently offered to Egyptian institutions only by the AUF and hence courses must be offered in French language.

Participants in SurveyI, that are supported by the AUF, were asked whether that they would have chosen a language other than French if they had the choice, knowing that all participants in this survey are from French speaking countries. About 24% of the participants answered yes, the origin of these participants' institutions programs are from MENA Region, Sub-Saharan Africa and Europe. Only one French institution

was among this slice, it does not receive enough number of applications because of the specialty not because of the language, while the other institutions from MENA and Sub-Saharan Africa that answered “yes” are located in countries where French is not the sole or not the first official language.

In SurveyII, participants were asked what teaching language they would choose if they were offering e-learning degree. None of the participants chose French, 69, 2% chose English, 23.07% chose Arabic, 7.69% said that it could be offered in a combination of languages.

Egypt is currently offering e-programs that the majority of Egyptian cannot benefit from. This is the same reason that makes French-speakers from other Egyptian institutions reluctant about applying for the AUF call of proposals, without neglecting that, the public is still suspicious about ‘e-learning’.

The two programs assume a great responsibility in increasing the Egyptian public confidence in ‘e-learning’. Yet, there still be the main obstacle regarding the absence of other institution offering competent support as the AUF in other popular teaching languages.

2. Overview on AUF support offered to e-learning programs

The AUF or the Agency of French-Speaking Universities is the main operator of French language in institutions. The head office is located in Canada, Montréal. It is financed mainly by France (more than 75%); remaining amount is offered by Quebec, Belgium and Switzerland. It works with partnership of institutions that have chosen French as teaching and/or research language. The agency was born in 1961 and passed through different development and expansion phases. Currently, it works with 434 agents in all continents, following 71 institutions that are adhered to nine bureaus managed directly by the AUF [2]. They share experience, encourage scientific collaboration, support research and training future actors of the development.

The AUF agency publishes, on its official website each year, a call for proposals for creating e-learning programs, offering support in different areas.

In SurveyI, participants were asked to assign a degree of significance for every support area. It should be noted that Northern countries do not get support in all areas as the Southern countries. The AUF supports e-programs in the following areas:

2.1. Educational platform free hosting

AUF server hosts the educational platform for free for the first 4 years. The value of importance assigned to this area of support, as expected, was inversely proportional with the welfare of the region. Therefore it was as low as 0.5/4 for the European Institutions, and as high as 2.85/4 for the Sub-Saharan African institutions.

2.2. Training of the academic and administrative staff

It consists of training:

- course creators: they take training on using the educational platform “Moodle” and adapting the course for electronic learning,
- tutors: they are trained on online tutoring and take tutors certification, and
- administrative coordinator, it consists of problem based training.

This area of support got as shown in figure 1 the highest degree of importance by the institutions of Sub-Saharan Africa and lower by MENA. All institutions of MENA region assigned a “4” also; except two institutions that they did not get support yet in this area during the preparation for their program.

2.3. Partial payment for e-course creation

AUF offers an incentive pay for the course creator and in return the institutions make 25% of the course available for free access on its website.

The AUF expects that such programs get another support and another payment from the university that signed the collaboration agreement. To be realistic, if a public institution from a developing country is asked to contribute with money, the agreement will more likely fail. Sharing with workforce and brains is what universities from these countries offer with pride.

2.4. Support of the AUF experts

Experts’ support means getting support in different levels:

- technical, while supplying the platform with courses and customizing the parameters to meet the needs of the learning program;
- consultancy,
 - on cost analysis and budget preparation that are essential to set the tuition fees,
 - on authorship and copyrights during courses preparation,
 - on the compliance of activities and assignments to e-learning environment, and
 - on diverse backend issues that arise as result of implementation of the key service of e-learning, which is tutoring.

2.5. Call for application on the AUF website & scholarship for students

AUF enlists the online degrees in its yearly call for applications. French-speaking applicants from different countries look always for programs offered by the AUF.

In SurveyI, institutions from MENA region and Sub-Saharan Africa assigned the highest value in the scale of importance “4”, and the total value assigned by European institutions, is as high as 3.5.

One of the most important reasons that make students from Southern French-speaking countries look for programs published on the AUF website is the scholarship offered. Participants in SurveyI from Europe, MENA and Sub-Saharan Africa assigned almost equal value to the high significance of scholarships offered by the AUF.

2.6. AUF local campuses serving as students’ bureau

Local campus is usually an office in a well-known university in French speaking countries, located in the capital or the second most “important” city in the country. This office receives the application submitted by all the applicants to all e-programs supported by the AUF. The fees are also collected via this bureau, another strong support area that was assigned a high value of importance by the participants in SurveyI.

2.7. AUF local campuses serving as free cyber café

All applicants accepted in any of AUF supported programs either benefiting from scholarship or not profit from free access to computer and internet in AUF local campuses. This area of support was assigned a high value of importance by participants, from Europe, MENA and Sub-Saharan Africa that is 3.25, 3.8 and 3.85 respectively.

2.8. AUF local campuses serving as test center

AUF office in Paris organizes exams in all local campuses for students of different programs.

Again, another area of support that is judged strong by survey participants, yet Sub-Saharan Africa institutions were relatively the least interested in this support area. As most students subscribed in these programs are from West Africa, the curve inversion is simply due to geographical position of each of these institutions. Transportation from African to European country requires flight and accommodation. Boundaries between some African countries are as the boundary between Boston and Cambridge, a “bridge”.

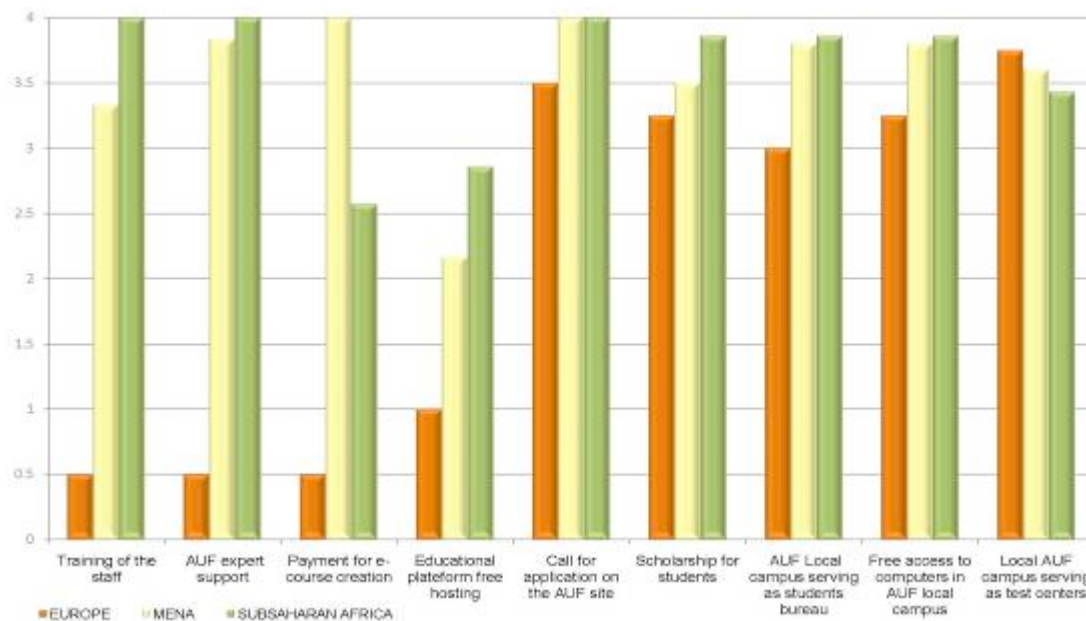


Figure 1: Index of importance assigned by institutions from Europe, MENA and Sub-Saharan Africa to the different areas of support offered by the AUF to e-learning programs in French speaking countries

3. Analysis of e-program implementation

As any program, project or production process there should be a continuous improvement to the system that arises mainly from change in demand, outputs and results of the system implementation.

3.1. Choosing the field of study and launching an E-program

According to SurveyI, the main reason for choosing the specialty of the program (multiple choices allowed) is being a discipline very much in demand in target countries (62%). Among the other reasons indicated were being:

- the same specialty of a team enthusiastic about the idea (37.5%),
- the same specialty of the project investigator (31.25%),
- absent in the country of the project investigator (31.25%),
- absent in the target countries (31.25%), and
- the same specialty of a group experienced in e-learning technologies (25%).

Participants in SurveyI were asked what could have motivated the project investigator to create an e-learning degree in his institution; their answers are summarized in the following graph. They also added as another reason, which is helping students get degree without leaving their jobs or their countries.

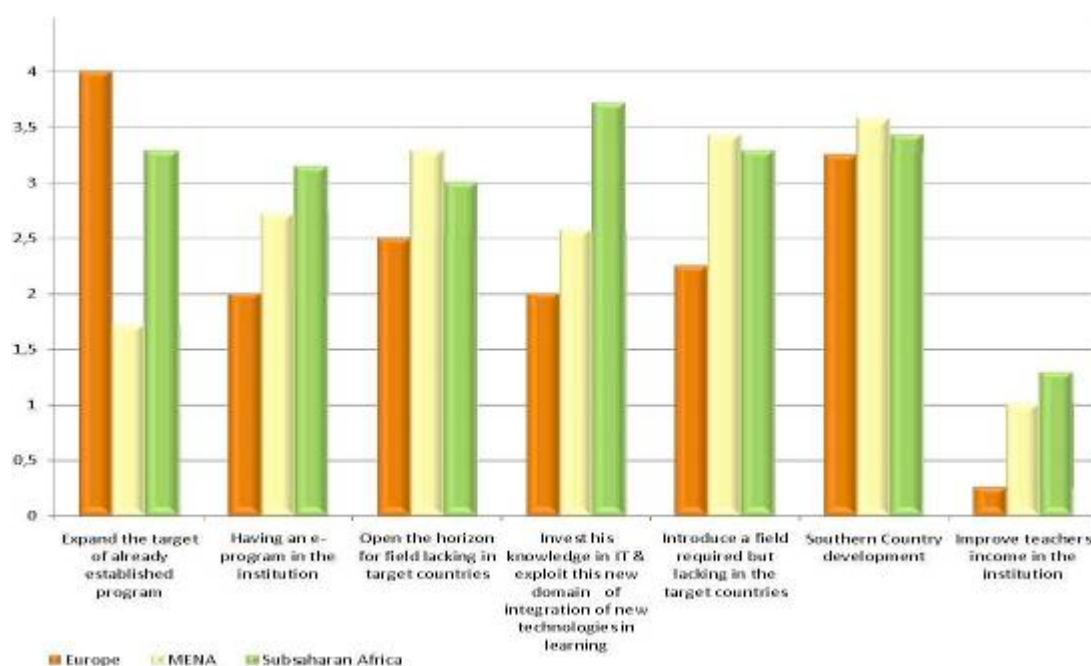


Figure 2: Index of importance assigned by institutions from Europe, MENA and Sub-Saharan Africa to the different reasons that motivated the project investigator to create an e-learning program

To profit from the true power of e-learning and overseas outreach, we should use technology integration in learning as tool not as objective. Moreover, the specialty of an e-learning program could be or should be the specialty that is well present and deeply rooted in the country of the certifying institution and in need in target countries.

3.2. Certification and accreditation

As mentioned earlier, the local digital campuses of the AUF serve as students' bureau, they check the students ID and certification. Yet, this procedure is not 100% reliable, and some institutions express concern about certificates issued from some countries that gained reputation in selling fake certificates and fear that students may get

through them the “authentic” certificate they never had. Moreover, examiners in many occasions are not able to determine the equivalency of a certificate issued from a university from Southern countries.

Talk about authentication and accreditation leads us to address another subject concerning weighing of online programs.

About 50% of the participants in SurveyI agree that ‘e-learning’ is still underestimated in their countries in Sub-Saharan Africa (28.5%), MENA (71.4%) and Europe (75%).

Two questions were asked in SurveyI to check institutions’ perceptions in these terms. The first question was about whether the joint degree (Northern – Southern institutions) gives more value to the program. About 82.5% answered yes as expected. However, the statistics of answers to the other question seemed contradictory. *"Do the learners express more interest in courses offered or tutored by teachers from the North?"*. 29.5% answered "no" and about 17.5% “don’t think so”. These two groups said that joint degree gives more value yet they think or find that learners do not show more interest in courses offered by teachers from the ‘North’. To interpret these answers, those two questions were re-asked to several students of Neurobiology program. Almost all students had the same answers:

“A teacher to be qualified does not have to be from Northern country”. “A diploma or certificate to be of more value and accreditation according to the recruiters it is strongly recommended to be issued by an institution from Northern country”.

3.3. E-program tuitions fees

Participants in SurveyI were asked whether tuition fees cover well their program.

The answers to this question were quite diversified. About 33.3% answered yes. As expected, none of this slice is a European institution. About 50% answered no, the third of which mentioned that other resources help. About 11% answered that they still do not know, newly launched programs. One of the participants thinks it depends on the number of students received each year.

According to the survey, a percentage of students varying between less than 10% and 25% cannot benefit from the AUF scholarship and afford paying the remaining amount.

In several occasions, AUF experts like to mention that a European institution, thanks to the high quality education offered, it gained a great reputation that made it double the program tuitions fees two times, and according to their call for application on the AUF website the difference between e-learning fees and in-class fees is shrinking. [3]

3.4. Tutors recruitment & Tutoring Quality

The current method adopted to recruit tutors is to publish a call for tutors with the call for application of the students, encouraging the tutors from Southern countries to apply. Few institutions do not publish a call for tutors and make the course creator accomplish the tutoring tasks.

Having the course creators accomplish the tutors tasks might be a good choice if, according to the program specialty and objectives, the tutors will answer course specific questions. In other programs or courses, it is recommended to hire tutors who are only “acquainted” with the discipline but not expert in order not to guide the students thinking, or better call them here “learners”.

Participants in the survey were asked to choose the best method to recruit tutors: call for application or having an online tutors' directory accessible to recruiters. 24% support the current method adopted by the AUF, call for applications. Only 6% suggest the option of having the course creators as tutors. As to the 70%, they think that tutors' directory would be the best choice. Actually, there is no online tutors' directory.

In order to improve the quality of tutoring service, AUF is currently developing a program for tutors' certification. First level of this program was completed; the second and third levels are under development.

In spite of the high quality of the content of this training, there is a missing key element, which is learning how to evaluate individual work, and teamwork online.

The tutors are told what they should do but not how to. Tutors in several occasions miss the target of making students work together, and teamwork evaluation is not always as expected. This, in turn, has a strong negative effect on the learners' performance.

3.5. E-program targeting professionals

Online degrees mostly target professionals; it helps them get a degree without leaving work. Some tutored sessions are offered at the students' working hours, so they have to connect from work. Should presence and absence in tutored sessions be graded? The answer to this question remains unanswered.

Also in the call for application, the applicants are asked whether they need the local campus support as free cyber café. Many answer "yes". From the experience of the Neurobiology program, it turned out that students are not able to profit from this, for two main reasons. First, the local campuses in all French-speaking countries are located in one city only except in few countries [4], where most residents of these cities have a relatively good internet connection at their place. As to the other underestimated cities that suffer from low bandwidth and expensive internet connection, in addition to frequent power outage, they are distant from the local campus. Secondly, local campus are open only from 9am to 5pm, 5 days a week (either from Monday to Friday or Sunday to Thursday) when most, if not all, students are at work.

4. Conclusion

Technology integration in education has demonstrated a great capacity in outreach, north-south and south-south collaboration, as well as evolution of teaching and learning methodology that Egypt as well as several developing countries had never known.

The Egyptian e-program serves a model of how a developing country could actively use new technology not as end user but as service provider and hence contribute in the development of developing countries. To optimize the efficiency of this service, some components are still needed in the infrastructure and some improvements to the already installed system should be integrated, such as:

- Development programs and organizations that allocate funds for education in developing countries should consider creating a competent supporting organization as the AUF, in other popular teaching language.

- Large companies can cofinance e-learning programs and allow students to do their practical work and research in their enterprise. Competent e-learning programs adopt the slogan of “Train more, cost less with no quality compromises”.
- Choosing best discipline for specific target countries should not depend only on the view of a group of individuals, it can be made by the help of international and national development organizations and through local surveys.
- Supporting e-learning may start with creating local digital campuses in main cities or capitals but expansions should be considered in a mid and long terms plan through self-sufficiency fund. Local campuses are important even if the program outreach is national.
- It is important to develop an online tutors’ directory at the disposal of the recruiters that will encourage tutors to boost their career and improve their qualifications and performance, especially if this directory contains a recommendations section.
- There should be one comprehensive and authenticated anti-fake certificate online platform accessible to virtual universities. This platform should also offer services for learning and work experience validation accessible to virtual universities and potential e-program students or candidates. All universities should include their certification and credit hours systems whether they are “accredited” or not.
- Soft drinks dispensers, ATMs and telephone booth are good inspiration for creating connected computer “booths” or “cabinets” that may be available for students 24/7 in different towns of developing countries.
- Online learners should be privileged by having access to international journals of science and have more access permission to virtual libraries and virtual conferences. They can also have a student discount card for their online environment.
- E-learning programs with the current methodological learning process, confirm that it is not about distance learning anymore, no more borders, students from different countries join in the same place, teamwork and collaboration between students are encouraged. Through their ideas and projects for their country, they share their dreams and synergize their efforts to suggest new approaches and programs to develop their countries. An online directory of projects submitted by students will help avoid redundancy and encourage innovation but also will work on protecting those projects and innovative ideas through clear agreement between students, mentors and certifying universities, which partially share the copyrights of researches presented by the students.

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