

Meryem Laadem, 2017

Volume 1 Issue 2, pp.115-133

Date of Publication: 28th December 2017

DOI-<https://dx.doi.org/10.20319/pijtel.2017.12.115133>

This paper can be cited: Laadem, M. (2017). E-Learning Integration in Higher Education: Focus on Moroccan Departments of English. PUPIL: International Journal of Teaching, Education and Learning, 1(2), 115-133.

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E-LEARNING INTEGRATION IN HIGHER EDUCATION: FOCUS ON MOROCCAN DEPARTMENTS OF ENGLISH

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Abstract

This research paper elaborates on teaching and learning English by the e-learning technology. It lays the ground for its integration in Moroccan Higher Education Institutions. Moreover, the research tries to examine the internal and external factors, which are involved in the process of integrating e-learning in the Moroccan context. The research investigates the departments of English in six higher education institutions in Morocco. First, it examines the present situation of English Language Teaching at the departments of English. Second, it tries to figure out whether positive attitudes of English educators are sufficient to advance teaching English in Moroccan universities using e-learning. The main purpose of this dissertation is to explore how teaching and learning English in higher education are performed using e-learning. The study takes the constructivism and the connectivism theories as its significant frame of investigation. These theories are joined with subjective hypothesis of learning with modern technologies. The study was based on the mixed method design to collect relevant data. It was significant to generate more information in the field work. All in all, e-learning in Morocco is still in its infancy. It requires more investigation in order to achieve the best quality of higher education.

Keywords

E-Learning, Integration, Higher Education (HE), English as a Second Language (ESL)

1. Introduction

There is a growing support for the claim that the last decades have witnessed a great emergence of modern tools of communication such as the internet. It has changed our everyday life activities, economy, policy, health and education. The internet enabled most of the teaching institutions to change their modes of teaching all over the world. Computer networks and modern technologies have offered opportunities to cope with the dramatic change in the learning demands. Nowadays, traditional forms of education are no longer appropriate to the learners' ways of learning, and to the social and educational development (Masud & Huang, 2012). Therefore, new forms of education based on technologies have started emerging to the surface.

The perspectives of teaching and learning English have changed thanks to the impact of globalization and the spread of English all over the world (Warschauer, 2004). There is an innovative development of modern technologies. Thus, researchers confirm that the world is revolving around two poles; English language and modern technologies of communication. In spite of digital development in most universities of Morocco, e-learning remains a challenging field for educators and students. The study investigates six Moroccan higher education institutions (HEI):

Table 1: Characteristics of the Research Sites

	Mohammed V University, Suisi	Sidi Mohammed Ben Abdellah University, Dhār Lmehraz	Moulay Ismail University	Al Akhawayn University	Ibn Tofail University	Faculty of Science of Education
Institution Type	Public	Public	Public	Private	Public	Public
Founded	1957	1975	1989	1993	1989	1983
Location	Rabat	Fes	Meknes	Ifrane	Kenitra	Rabat
Programs	Undergraduate Graduate	Undergraduate Graduate	Undergraduate Graduate	Undergraduate Graduate	Undergraduate Graduate	Undergraduate Graduate
Total Enrollment	21 548	63.782	35.148	2039	18.983	838 ¹
World Report Ranking	3654	3168	4246	3185	3362	12965
National Ranking (Info, 2016)	7	3	10	4	6	29

In developed countries, “e-learning is supposed to be an excellent solution for the old problem of mass education, beyond that of an impractical apprenticeship method since there are far too many knowledge seekers and not enough knowledge providers” (Penalvo, 2007, p.14). Consequently, numerous higher education institutions -in developed countries- have started the utilization of e-learning in their curricular programs.

2. Review of the Literature

Concerning this research study, so much literature has been written when trying to account for a successful definition of e-learning and its theoretical background. However less is written about how to implement it purposefully in teaching English. E-learning has transformed education by melting theory and practice in pedagogy. Even though its full integration might face certain obstacles, the e-learning remains a challenging turning point in the history of higher education institutions in Morocco. Reviewing the literature enlarges the research knowledge, it uncovers the knowledge and source of information that last researchers and experts in the field have achieved, and the research starts from their ending point.

¹ <http://fse.ma/wp-content/uploads/2015/11/effectif-des-%C3%A9tudiants.pdf>

The purpose of this study is three-face angles: the first is to discover the importance of integrating e-learning in the Moroccan higher education. The second is to identify the main factors and barriers that affect it. The third face is to be aware of the techniques that help learners improve their level of English as a language, and at the same time facilitates the work of teachers and their assessment to the students.

2.1 Statement of the Research Problem

In this dissertation, the research problem addressed is defined by finding effective integration of e-learning technology to achieve quality in teaching English within Moroccan higher education. Ehlers & Schneckenberg (1998) confirm that “the advancement of quality in teaching and learning at a university requires approaches at different levels. Learning culture may provide a conceptual frame integrating initiatives and changes; at the individual, interactional, and institutional level” (p. 84).

Since the 21st millennium is described as a digitalized era in which the language learning field has already started depending on the use of technology. The research requires varied factors to be considered, including those related to technology, pedagogy and individuals.

Therefore, learners at the university and higher education institutions are supposed to be equipped with the basic skills in order to use easily the technologies in relation to the use of e-learning, as a means of learning English as a foreign language. Castro-Romero (2013) adds that “over the last two decades or so, technology -understood as the use of computers and the Internet- has become more and more influential in all aspects of the educational, business, and economic sectors of our world” (p.39).

The study under investigation clarifies the overall picture of e-learning uses and practices among the departments of English within Moroccan faculties of human sciences. The findings of the study once been generalized can be applied not just for English language learning but also for other languages such as Arabic and French, since the degree of e-learning integration is likely to be similar among languages teaching methods. The following figure represents the e-learning continuum in relation to the three modes:

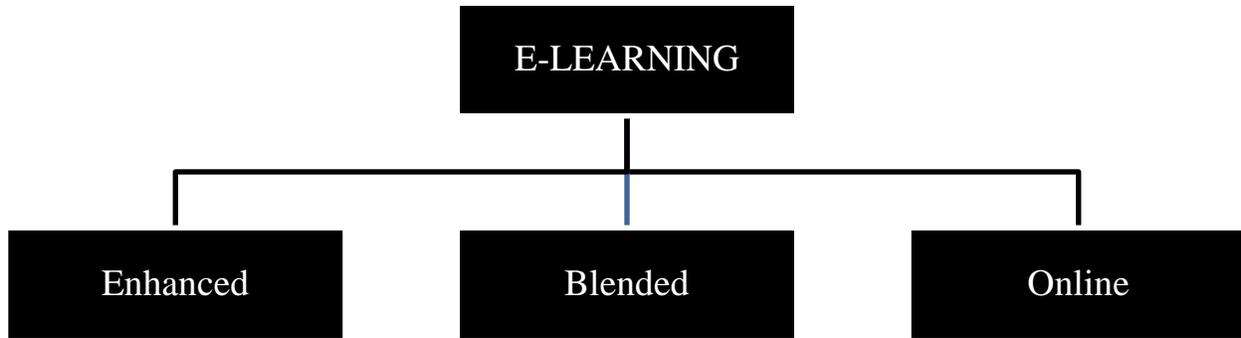


Figure 1: A Continuum of E-learning
Source: Garrison & Kanuka (2004, p. 97)

Even though, there is no valid e-learning approach up to the moment that can be implemented in HEIs with one hundred percent of positive results. Kituyi & Tusubira (2013) argue that e-learning, and “blended learning theory is a good initiative towards integration of learning, although it does not show how each learning method integrates with others” (p.23). In fact, the degree of integration remains to the institution which decides based on deep analysis of the four elements for e-learning: the university, the government, the teacher, and the learner.

Also, the current study attempted to unveil the positive qualities of using e-learning technology for the learners themselves and for the teachers in order to achieve good quality for the learning-teaching process in higher education. Abidin, Pour-Mohammadi & Abuhelaiga (2011) claim that “The use of technology in language learning is indispensable in this cyber age as both instructors and students feel the need to be exposed to the latest method and media for teaching and learning a language” (p.20).

Therefore, the need to use modern technologies in language teaching has become a necessity, since they positively support the process of learning. Moreover, they transform passive learners to become active and interactive learners. They can search for the information, look for questions, seek answers, explore new knowledge, and build their critical thinking via the use of computers and the internet.

2.2 Definition of Key Terms

The key terms definitions will be provided in order to facilitate the comprehension and the understanding of the information within this study, they facilitate the interpretation of the meaning by any reader since they are considered as part of the research.

- *E-learning*: The newly coined term “e-learning” is most of the time used as an umbrella term for other expressions which are highly attached to the computer and the internet, simply put

the electronic media serves to transmit knowledge between people. According to Littlejohn (2007) “e-learning is a term used in radically different ways by different people, perhaps this is unsurprising in an area in which definitions and boundaries are rapidly shifting” (p. 72). So, understanding e-learning is simple and not simple, since it combines two faces for the same coin.

- Non-experts view e-learning as computer assisted learning. However, experts consider that an e-learning would not be e-learning if it was not particularly based on teaching approaches and pedagogical content and that is the starting point for an academic conceptual definition.

- *Integration:* It is a scientific term that involves various operations from introducing the process of technology to the final step of getting results of the learning. In this study the term integration goes with the ways of combining e-learning with the traditional teaching methods in order to enhance teaching and learning English language in HEIs. E-learning integration means basically approaching e-learning as an instructional tool for delivering subject content in the curriculum already existing in HEIs. Both face-to-face and online learning experiences can be joined together, by integrating the powerful components of each one with the other, and by understanding their points of differences in order to produce strong learning discourse for the benefit of the learner.

- *Higher Education (HE):* Such as colleges of education and faculties of education in the universities. It also includes engineering schools preceded by preparatory classes, higher institutions and schools, training institutions of pedagogical teachers and specialized technicians.

- *English as a second language (ESL):* English is an international language, in the twenty first century it is considered as the language of science, economy, industry, humanities and education. It is a second language for countries which speak other languages, and in which English is not their primary language. Many countries have started teaching as ESL in order to follow the trends of globalization, and morocco is one of them.

2.3 Research Questions

Research questions are very important to analyze the objectives of the research study; they are set out from the very beginning. Furthermore, the research questions (RQs) do not happen haphazardly. They are primarily dictated by the review of literature, the purpose of the research, and the theme of the thesis. The research paper seeks to answer the following main research questions:

RQ 1: What kinds of information and communication technologies (ICT) do the learners and teachers in this study own and have access to?

RQ 2: How do they use e-learning technology for learning English purposes?

RQ 3: How skilled are the students and University teachers in using e-learning?

RQ 4: How do learners' variables (e.g., gender, age, class and major) affect their computing skills and use?

2.4 Research Hypotheses

A hypothesis is different than a research question; it is a statement about the relationship between two or more variables that is experimented to prove its truthfulness or its feasibility. A hypothesis can be accepted or not accepted. Cohen, Manion & Morrison (2011) declare that “a hypothesis can be supported or not supported” (p.609). There are two types of hypotheses; a directional hypothesis and a non-directional hypothesis. The directional outlines the differences between two groups of participants or two conditions of research such as (A is better than B, or A is worse than B). While the non-directional dictates the differences between two groups of participants or conditions of research. “A hypothesis is a working assumption. Usually this assumption is formulated before experiments are carried out to test it. And if the hypothesis holds up against existing and newly obtained data, the scientist may formulate it as a theory” (Gosling & Noordam, 2006, p.24).

In the research, there are the null hypothesis and the alternative hypothesis, and the alternative hypothesis is mostly supported when the null hypothesis is not supported. Most relevant hypotheses to be taken into consideration in the study undergone -in order to identify the varied factors that may influence e-learning integration in higher education- are the following:

- *H1*: Many factors affect the integration of e-learning in the Moroccan education system.
- *H2*: There are several effective ways to use e-learning technology in learning EFL and teachers should know how to exploit it for both purposes of teaching and assessment.
- *H3*: There is no relationship between teachers and students' level of computing skills and the integration of e-learning.
- *H4*: The use of e-learning can improve the quality of EFL.

The hypotheses are subjected to study in order to measure their feasibility by using different methods and tools, which are devoted to confirming or to rejecting the hypotheses.

3. English as a Foreign Language (EFL)

Since the major goal of this research study is to investigate the role of integrating e-learning technology in EFL classrooms, it is worthwhile to shed light on the importance of ELT

in Morocco, which has been given special attention in recent years. Morocco as one of the francophone countries has become aware of the privileged status of English worldwide, which imposes on it to reform the educational system as a whole from teaching English in secondary schools to higher education institutions. The new status of English in the Moroccan educational system has been particularly imposed by global, social and economic conditions so as to go with the flow of globalization. As non-native speakers, Moroccan students still face some deficiencies related to communication by using English language; this is why the ministry of National Education has given it much more priority to empower students' communication skills, and to enhance economic reform.

3.1 Teaching Approaches

Teaching English for Moroccan learners will definitely establish a kind of openness to the world. The concept that English starts to over-dominate French in classroom remains debatable. Hence some francophone researchers are urging Morocco not to adopt English as the first foreign language within administrative and educational systems. Students in higher education have become aware of their learning needs and they assume certain responsibility for their learning, they are only triggered towards knowledge based on pedagogical approaches of learning.

3.2 Learning Theories

Apparently, Learners usually learn by practising the language in authentic situations. In fact, most approaches to language learning tend to place an emphasis on interpersonal communication, which is usually found in face-to-face classroom situations. Therefore, those critics for online approach for traditional learning theories urge teachers to ensure the appropriateness of the adopted approach, to select carefully the effective learning materials based on the students' interests, to provide constructive feedback and to be aware that the learning activities and assessment help the learner to actively construct the new knowledge.

4. Methodology and Background

A good research paper usually is based on a strong methodology. The study can have successful results if it depends on an adequate theoretical framework. The task of collecting the data is difficult in the sense that the researcher should select precisely the informants and the circumstances. That is to say, collecting the data is primarily based on finding relevant participants who are willing to inform honestly, and the circumstances under which the

informants were to perform and enrich the data. The methodology that is applied in the study has been chosen based on the mixed method approach in order to acquire information, and to deduce conclusions about the use of e-learning for English language learning in higher education.

4.1 Theoretical Framework

It is very important to understand the concept of different learning theories before investigating the use of e-learning technology. The present study adopts a Constructivist approach and a Connectivism approach in terms of analyzing the e-activities, the learning, and the teaching via e-learning in higher education. Even though, there is no valid e-learning approach up to the moment that can be implemented in HEIs with one hundred percent of positive results. In fact, the degree of integration remains to the institution which decides based on deep analysis of many four stakeholders for e-learning: the school, the government, the teacher and the learner. In the recent years, technology has invaded our life in different aspects. However, the learning theories based on technology still undergone a certain shortage at the level of effectiveness and practicality.

The figure below presents the overview of the research framework. Which underlines the main variables that interfere in promoting the quality of teaching English in higher education. The framework of research for this study is importantly related to the context of teaching and learning English as a foreign language in Moroccan HEIs through the integration of e-learning.

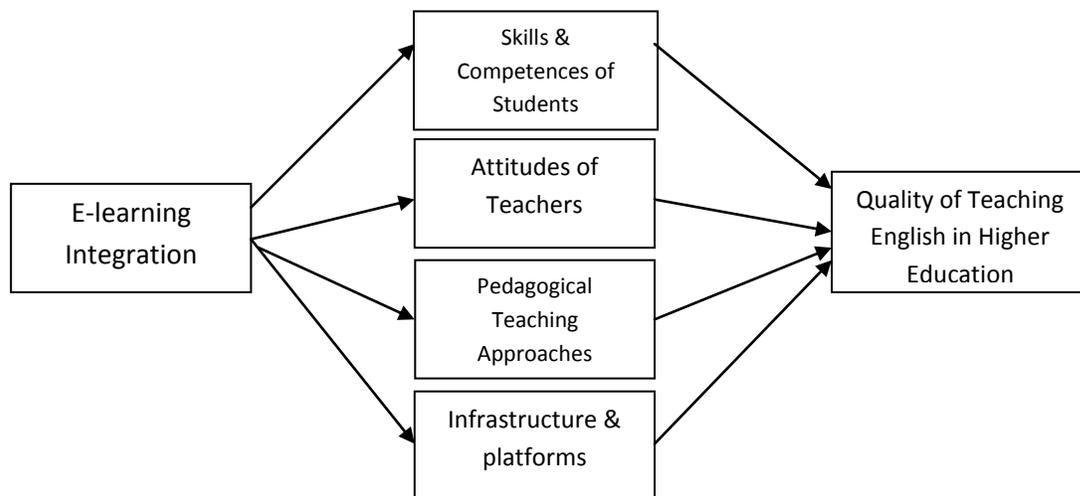


Figure 2: *Framework of the Research Study*

The e-courses in e-learning need to be generated from theoretical approaches of English language learning. The best ones suit the objectives of the departments' curriculum, the different styles of learners, and according to the teachers' roles in disseminating the course and providing the appropriate feedback. Nevertheless, most of these features are ignored when talking about a practical framework based on strong theories of language teaching. The integration of e-learning calls for varied activities that are shaped by pedagogical concepts, and applied theoretical background.

4.2 Method of Data Collection

The mixed method approach is used to collect and analyze data. It integrates statistical and thematic techniques, besides to some other tools of mixed method approach. The mixed methods approach is considered as a third research paradigm based on using research data. The choice of incorporating the mixed methods research needs to be justified, since the use of quantitative research aims at targeting variables and examining performance. Whereas the use of the qualitative research implies investigating the problem and describing the participants or situations. Therefore, mixed methods approach is applicable and suitable to different research problems.

5. Results and Discussion

This study critically examines the e-learning integration in the Moroccan higher education context and explores the environmental factors (internal and external) that either facilitate or hinder its integration. Also, it investigates the practical model of e-learning platforms in comparison to the traditional practices of teaching English language for the sake of improving the students' learning and thus the quality of education. The data were analyzed using SPSS package 21 for statistical analysis. Both questionnaires for teachers and students were checked for reliability and content validity before their distribution to respondents in the research sites. Content Validity Index (CVI) was used to test the validity of the questionnaires. The questionnaire of teachers is tested first as seen in Tables 2 and 3.

Table 2: *Validity Results for Teachers' Questionnaire*

Variable	Items	CVI
Benefits of e-learning	9	,650
Barriers to e-learning integration	5	,778
E-learning Training for teachers	4	,542

Table 3: *Reliability Results for Teachers' Questionnaire*
Reliability Statistics

Cronbach's Alpha	N of Items
,627	8

Content Validity Index (CVI) was used to test the validity of both the questionnaires of teachers and student. The content validity test was greater than 0.5 which indicates that the research instrument was valid. The second questionnaire (students) was tested as well. The test was conducted for all the variables separately, and a result greater than 0.6 was approved that the questionnaire was valid. The chart below represents the content validity of the students' questionnaire.

Table 4: *Reliability Results for Students' Questionnaire*
Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,786	,699	49

The Questionnaires were distributed in the research sites after testing them. They were basically self-administered. The results obtained from both questionnaires and from the online questionnaire were compared at the final stage of data analysis, and still the results were consistent.

The first findings from the students' questionnaire indicate that there are several factors which encourage students to resort to the e-learning platforms such as its design, its features which are appealing than the book, its flexibility, and its easiness to use. Consequently, dealing with the platforms does not require intensive skills from students to own, they need only to know how to use the computer and then surfing on the e-learning platform by simple clicks.

Also most of students are digitalized which means that they are already equipped with the necessary tools to use the e-learning platforms, they use the computer and the internet at a regular basis in their everyday life. However, students are not completely happy with the traditional teaching methods, they are eager for more development in the teaching and the assessment activities. In addition, the participants claimed to use most of the strategies for learning in traditional classrooms similar to the one used in e-learning, which indicates that they would not have any problem concerning the subjects and the teaching material in e-learning. Nevertheless, the respondents declared to learn better when using modern technologies, they showed great awareness towards the environmental factors which can results in bad implementation of this pedagogical tool.

These respondents reported that they had no professional skills of using computers. However, they felt comfortable about computers, and they used them in learning and sharing knowledge. Within the same scale 0,6 % and 0,2% of respondents do not use computer at all or rarely used.

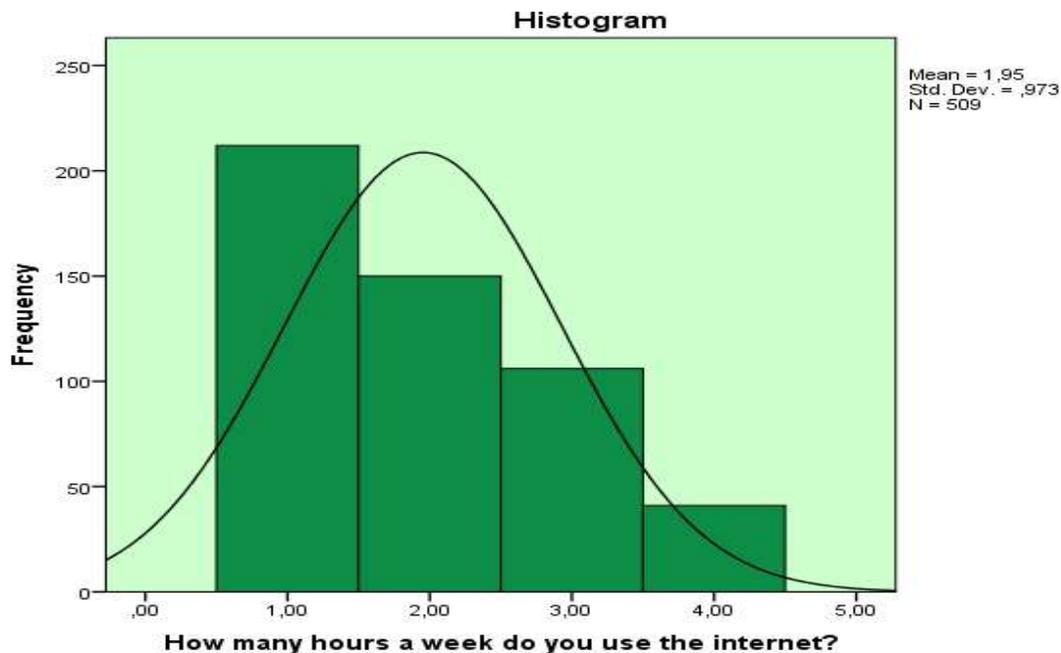


Figure 3: *The Frequency of Hours for the Internet Use Per Week*

The figure above summarizes the frequency of hours that learners spend in using the internet per week. As represented by a mean score on a 5-point scale. Where 5 (16-20 hours) represents the maximum score of the scale and 1(0-5 hours) represents the minimum.

Second, the finding from the teachers' questionnaire (printed & online) showed that most of them tended to use technology in their teaching activities, though the assessment is not yet improved to be like developed countries which the invented technological methods for assessment. The teachers in fact showed awareness towards the development in the teaching approaches and methods, and in the enduring change of students of this generation cognitively and technologically, and also in the effect of the globalization and informationization of the world.

Teachers themselves are suffering from environmental pressures of the organization and the pedagogical challenges. As a result, they claim that there is a shortage at the level of pedagogical trainings for teachers which have to be planned on a regular basis for all teachers over Morocco in order to update their knowledge. The fact that some of them have participated in some national trainings (GENIE program) does not mean that they become professionals in the special area. However, most of the training programs did not promote to the level that teachers are eager to achieve so as to follow the international educational systems.

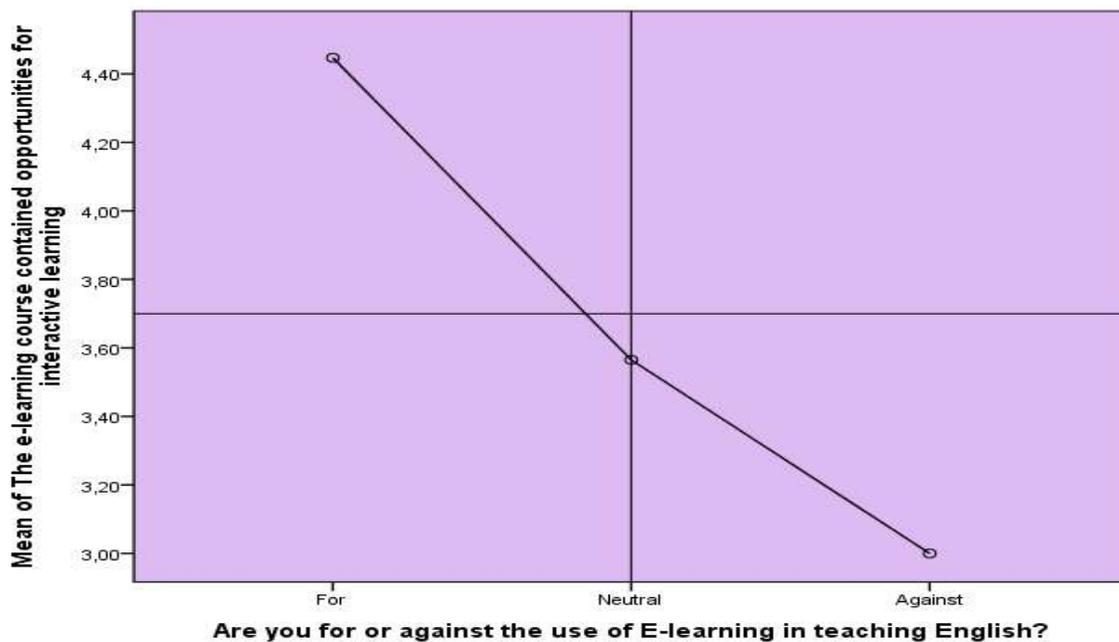


Figure 4: *One-way ANOVA Analysis for Learning Methods and the Use of E-learning*

The ANOVA analysis is used to test for the differences among groups of variable which determine the characteristics of e-learning in teaching English as a foreign language and the consent to integrate e-learning or not. The figure above illustrates how respondents -who believe that e-learning does not offer opportunities for effective learning of the English language- are against the integration of e-learning in the educational system. However, those -who are for the integration- believe strongly that e-learning offers perfect opportunities to teaching English as a foreign language.

Third, the findings from the interview have completely empowered the findings of both questionnaires, teachers were totally honest and they showed a high professionalism in experiencing different angles of the Moroccan educational system. Therefore, the participants found it easier to report their teaching activities in the interview. They are convinced that the use of e-learning will lower the burden from their shoulders by enhancing individual learning of the students. and that it will establish a kind of powerful contact of communication between the teacher, the teaching content, the students, and the administration on a regular basis. Also, the teachers' evaluation of the students' skills and competencies was positive; they are aware that their students are aware.

Table 5: Gender of the Respondents
Gender of Students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	310	60,9	60,9	60,9
	Female	199	39,1	39,1	100,0
	Total	509	100,0	100,0	

The total number of respondents was 509 from all the six research sites. They were distributed between 310 males and 199 females. The males are representing the 60,9 % from the total number of respondents, while the females are representing 39,1 %.

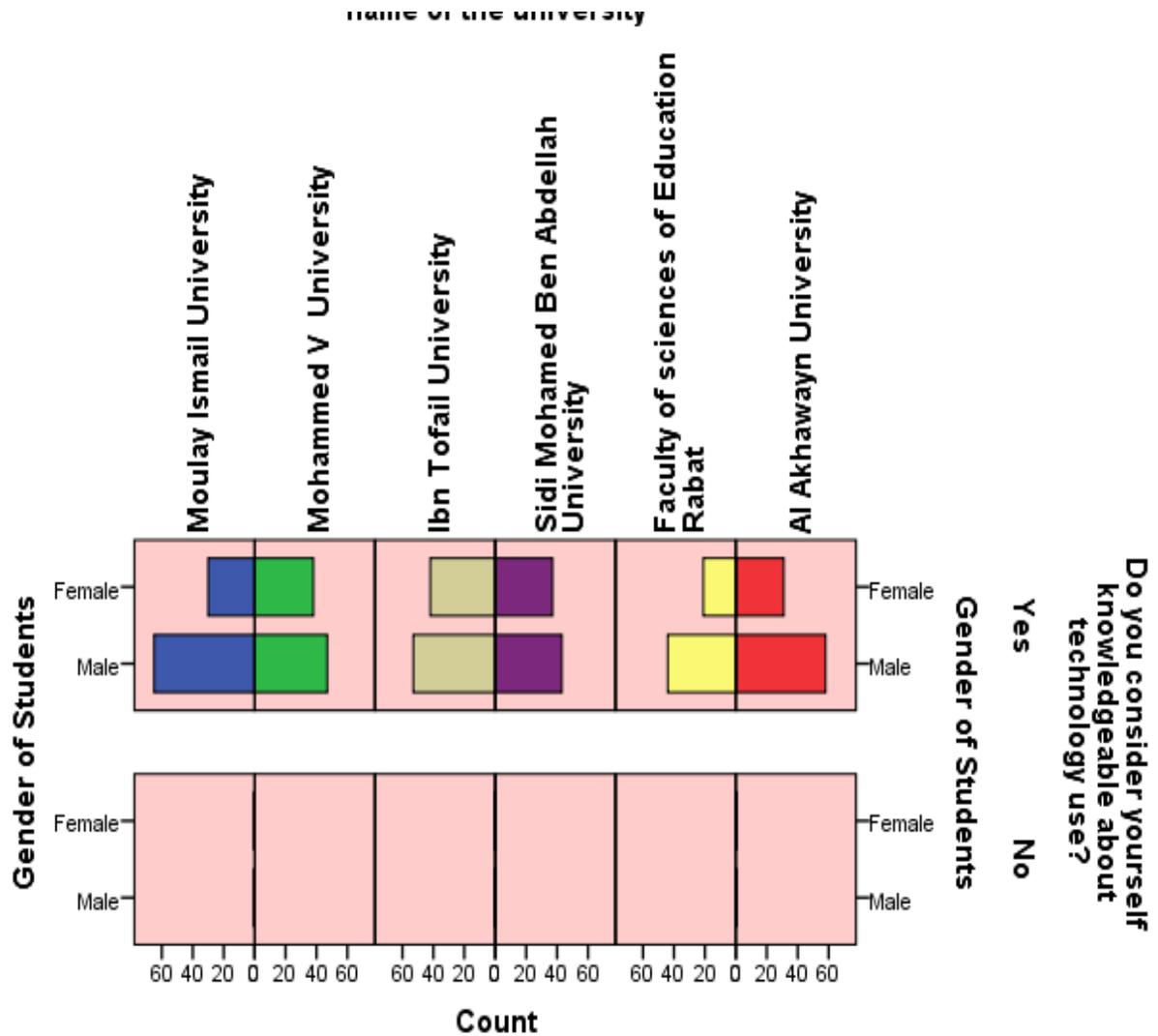


Figure 5: Gender in Relation to Skills of Using Technology

The figure 4 above illustrates that the level of using technology is higher in relation to males. However, it is lower when related to females. From another side the distribution among universities shows the same results. Males outnumber females in their skills of using technology.

The fourth findings from the observation also support the previous findings apart from some slight difference. The teaching strategies were different from one teacher to another, from a subject to another, and from one institution to another. In observational procedures, it was induced that the use of technology in English classes significantly affects the academic practices in teaching English and in the behavioral aspects of learning. Also, once observing the English classes, the researcher determines the type of communication established between teachers and learners, and the mode of teaching either teacher-centered or student-centered.

The fifth findings were based on the comparison between e-learning pedagogy of implementing teaching content and the pedagogy of teaching English in the classroom by targeting the four skills and the language parts vocabulary and grammar in e-learning for an effective language learning. Therefore, the study indicates that still there is a shortage at the level of the teaching content on e-learning platforms, the activities and the quizzes need to be enriched and updated every year.

Two possible solutions to solve this problem; first by organizing relevant trainings for teachers on the development of pedagogical teaching materials based on traditional curriculum (books of teaching, references), and second by employing administrative staff who are specialists and trained in designing teaching content for higher education institutions. On another side, assessments in e-learning have to gain more importance in order to be effective, valid and relevant.

6. Concluding Remarks

In conclusion, the overall aim of the present work is to supplement a stable ground for integrating e-learning in Moroccan higher education. E-learning may afford a higher quality with lower costs. The investigation carried out in this paper tends to highlight the integration of e-learning in higher education. Its practices become a new method of delivering information and sharing knowledge. Although its main goal exceeds the lines of disseminating data and information, it affords a free platform that is different from conventional teaching methods. In fact, it gives further dimensions to the teaching of English in higher education.

The issue of quality is of paramount importance especially in countries where education is a priority for everyone; the quality of the e-learning platform results in the quality of education. As a result, to improve the quality of education in general and of English in specific, e-learning tends to be subject to various functions where the English language is the focal point, but still its integration as part of the Moroccan syllabus remain in beginning. The on-going academic process of research involves deepening the investigation of any new teaching tool in order to improve its use and therefore its results. Furthermore, the appearance of new technologies such as the e-learning platforms significantly serves to help humans develop and promote their living context and educational context as well.

E-learning indeed becomes essentially related to some technical procedures and structural mechanisms that any educational platform is based on. The field of e-learning is still in its

infancy within the Moroccan context, thus the study is primarily concerned with the investigation of the different barriers that hinder the integration of e-learning. And also the helping Factors for an effective e-learning Integration in Higher Education.

Accordingly, the fact that skills (listening, reading, speaking, and writing) are interrelated they cannot be targeted separately. A writing text can be done in parallel with reading, a speaking skill can be assessed in written form, and a grammatical rule can be enhanced with oral speaking practice. The following screenshot introduces an example of some speaking activities in Moulay Ismail University, the activities concern public speaking, spoken English and study skills where all of them target the speaking skills of learners. The form of introducing speaking seems less effective since it does not involve real and authentic situations of using English orally.

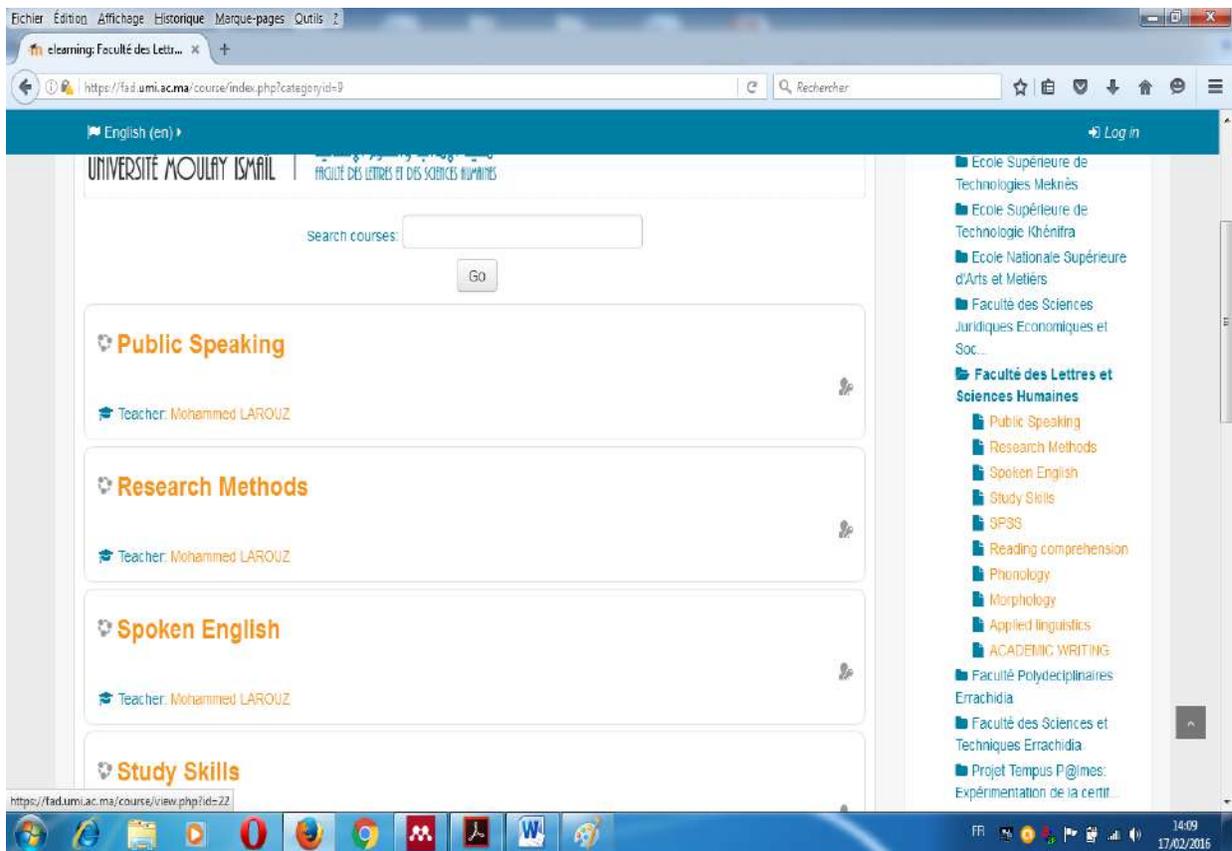


Figure 6: A Screenshot of Some E-learning Courses of Speaking Skill in Moulay Ismail University, Department of English

This dissertation expects to add to the exploratory and the explanatory nature of e-learning a sense of applicability and validity in the practical side in Moroccan higher education. The main goal is to achieve quality enhancement and improvement of English language learning as the results might be used for many other languages departments. The study aims purely to document for an original and innovative piece of work in the field of Education. A critical

component of the project is the promotion of the quality of communicative skills of university students; written and oral. As well as the promotion of linguistic and technological competencies of learners using English in parallel to their computing skills - as a matter of fact - which is very demanding in their future job market.

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