The Role of E-learning in Enhancing the Quality of Higher Education from the Point of View of Faculty Members at the Algerian University
-A Field Study at Jijel University-

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Abstract

The present study aimed at figuring out the role of e-learning in enhancing the quality of higher education in the Algerian university from the point of view of faculty members. To achieve the objectives of the study, the descriptive approach was followed and a questionnaire consisting of 58 questions was used after testing its psychometric characteristics (validity and reliability). It was administered to a randomly chosen sample of 106 members of the teaching staff at Mohamed Seddik Ben Yahia university of Jijel during the academic year 2019-2020. The data were processed using the statistical software package for the social sciences (spss). After the analysis of the data at hand, the researchers found out that e-learning contributes to a high extent in improving the quality of higher education as it provides flexibility, activates the learners' and instructors' roles, and updates the syllabi and programs' contents. Yet, its requirements at the Algerian university are highly limited.

Keywords: E-learning, Higher Education**,** Quality of Higher Education, Faculty Members, University.

1. **INTRODUCTION:** The need for education at all its levels in the society is increasing, making it one of the main pillars of development and growth. That is why governments gave it more importance and made it a priority. As a result, materials and human resources have been mobilized in order to improve the educational systems' quality. At this juncture, it is worth mentioning that higher education is one of the most intriguing sectors that must be restructured to keep pace with the new world order and the modern world's changes.

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Therefore, technology and e-learning have been used in order to overcome the deficits of the classical ways of teaching or to substitute them if necessary. Such substitution could be exemplified by what happened during the COVID-19 pandemic where universities around the world had to make recourse to distant education.

Following this line of thought, it should be stated that Algeria tried to adopt this new way of teaching after the outbreak of the pandemic to keep pace with the world's challenges. This method proved fruitful in many world universities while it failed in others. Unfortunately, the Algerian university was not far from such failure to the extent that what exists in Algerian universities cannot be called e-learning.

Accordingly, in this paper, the researchers try to focus on the extent to which e-learning contributed to improving the quality of higher education in Algeria from the perspective of the teaching staff at Jijel University.

Therefore, this study attempts to answer the following research questions:

-The main research question:

- To what extent does e-learning contribute to enhancing the quality of higher education from the point of view of faculty members?

The main research question is in turn subdivided into the following questions:

- To what extent are e-learning requirements available at the university?
- To what extent does e-learning provide flexibility for higher education?
- To what extent does e-learning contribute to activating the learner's and instructor's roles?
- To what extent does e-learning contribute to updating the contents of programs and syllabi?

2. **The Objectives of the Study:** The objectives of the present study could be summed up in the following:

- Figuring out the availability of e-learning requirements at the university.
- Finding out the extent to which e-learning contributes to providing flexibility for higher education.
- Figuring out the extent to which e-learning contributes to updating the contents of programs and syllabi.
- Figuring out the extent to which e-learning contributes to activating the learner's and instructor's roles.

3. **Hypotheses:** This study aims at examining the following hypotheses:

- There may be a very poor availability of e-learning requirements.
- E-learning may contribute highly to providing flexibility.
- E-learning may contribute highly to activating the learner's and instructor's roles.

- E-learning may contribute highly to updating the contents of programs and syllabi.

4. Study concepts

- **E-learning:** E-learning simply means the use of information and communication technology (ICT) in order to enhance learning in tertiary education. It is also considered as a good way to improve students' computer literacy and the skills they need when they start working (Ayu , 2020, p. 48). In a similar vein, (Abel & Abbas , 2008, p. 78) believe that e-learning refers to learning with the use of ICT. This definition is in conformity with that of the Higher Education Funding Council for England.
- **Higher Education:** According to Alemu (2018, pp.210-211), higher education refers to a set that constitutes the university, which is in turn a subset of higher education. Such a concept could also include post-secondary institutions like polytechnics, colleges of education, and "grandesécole". On the other hand, Modern Higher Education is defined as an organized tertiary learning and training activities and institutions that include conventional universities such as arts, humanities, and science faculties and more specialized university institutions in agriculture, engineering, science, and technology.
- **Quality in Higher Education:** The extent to which universities are capable of meeting their standards and of fulfilling their declared mission is referred to as quality in higher education. This suggests the existence of mechanisms meant to make sure that the university constantly meets its objectives: conveying and assessing perfection. This definition acknowledges both the diversity of assumed missions in higher education, and its importance in the general education system (Sârbu , Anca , Enache, & Dumitriu, 2009, p. 384).
- **Faculty Members:** The term faculty members refers to educators who work at a college or university (The Free Dictionary).
- **University:** The term university represents an institution at the highest level of education where you can study for a degree or do research. It brings men and women to a high level of intellectual development in the arts and science, and in the traditional professional disciplines, and promotes high-level research. Undeniably, the university remains a source of universal knowledge and highly skilled human power for the professions (Alemu, 2018, p. 211).
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5. Literature Review

The role of e-learning in enhancing the quality of higher education around the world has been recently an attention-grabbing destination for different researchers.

To begin with, Wani (2013), in a study entitled « The Relevance of E-learning in Higher Education », identified and analyzed emerging trends and models in e-learning for teacher education and professional development from the developing research base, both international trends and current developments. Educational institutions and teaching staff have many benefits due to the emergence of modern technology. Teachers have their own networks through which they connect themselves with other teachers across the globe. Institutions have web-supported classrooms. Similarly, it also enhanced the responsibilities of schools, colleges, and universities that should have such teachers who can produce such students, who after receiving their education can adjust themselves at any platform.

In another study, Soliman (2014) reported on the advantages of the E-learning Moodle and its role in enhancing "English Foreign language" (EFL) students' language skills and independent learning. An already running and established virtual learning environment, namely the E-learning Moodle software, is being used successfully in the British University in Egypt. The different activities and resources that are provided by E-learning have been described with an analysis of how they can be used to develop EFL students' language proficiency and independent learning.

Moreover, Murad and Azouz (2018) conducted a study on the impact of using E-learning as a means to enhance the quality of higher education in the Algerian university of Msila. It aims primarily at showing the importance of using technology in higher education, setting light on the methods that could be used to improve the quality insurance of higher education in Algeria and evaluating the use of e-learning in higher education. To achieve the objectives of the study, a questionnaire was administered to a randomly selected sample of (56) teachers from different faculties at Msila university. The analysis of the data using ANOVA test revealed that the quality of higher education in Algeria could be enhanced via the integration of e-learning by making use of the experiences of developed countries.

In a similar vein, Ayu (2020) explored learners' and lecturers' perceptions towards e-learning and how to deliver classes without face-to-face meetings at higher education by using an exploratory research approach. Importantly, this study was conducted in a private university in Lampung. Two online Reading courses were designed using online platform (SPADA). The first course was taken by first year students (N=18) and the second course was addressed to second year students (N=17). All courses were conducted online without face-

to-face meeting. They were also given e-learning materials including learning contracts, power point slides (between 10 to 15 minutes in length), study guides, and examples. The online activities included online forum discussions, individual and group-based assignments. The Online quiz and practice, however, were designed in each course to evaluate SPADA as an assessment tool. At the end of the course, they were invited to participate in a survey and a focus group discussion. They were asked to respond to a questionnaire using Likert scale. Accordingly, the findings showed that technical preparations are needed prior to e-learning and emphasized on the importance of using localized examples and cases for class discussion. The results also suggested to enhance the curriculum and raise standards at the lecturer level on various specific aspects, such as materials and activities.

6. Methods

Throughout the study, the descriptive method was used because it does not just stop at collecting the data, but analyses, interprets, classifies and draws results from it**.**

6.1. Study Population and Design

The main data collection tool was a questionnaire which was administered to a randomly selected group of 106 faculty members at the University of Mohamed Seddik Ben Yahia /Jijel.

6.2. Instrument

6.2.1. Description of the questionnaire

In order to collect data on the variables of the study, a questionnaire was used. It was designed on the basis of previous studies on the research topic and it consists of two main sections namely:

- E-learning requirements which were measured by 30 statements.
- The dependent variable (quality of higher education) which was divided into three dimensions viz: flexibility, which consists of 7 statements; activation of learners' and instructors' roles, which consists of 9 statements; and updating of syllabi and programs, which consists of 8 statements as shown in Table 1 below:

Table 1. Sections and Statements

Section	Statements
Section One: Personal Information	03
Section Two: E-learning Requirements	30
Section Three: Higher Education Quality Enhancement	24
Total	58

Source: the authors

A 5-point Likert scale was used to determine the role of e-learning in improving the quality of higher education. Importantly, number 5 is given for "strongly agree", 4 for "agree", 3 for "neutral", 2 for "disagree" and 1 for

"strongly disagree". Thus, the role of e-learning in enhancing the quality of higher education was measured as follows:

The arithmetic mean value was measured by giving the highest expected value 5 and the lowest expected value 1.

Thus, the arithmetic mean value is 5-1 = 4.

- If the arithmetic mean value was between (0.8) and (1.8), the role would be very weak.
- If the arithmetic mean value was between (1.8) and (2.6), the role would be weak.
- If the arithmetic mean value was between (2.6) and (3.4), the role would be medium.
- If the arithmetic mean value was between (3.4) and (4.2), the role would be high.
- If the arithmetic mean value was from (4.2) to (5), the role would be very high.

6.2.2. Measurements of the Psychometric Characteristics of the Questionnaire

- **Questionnaire validity (Validity of the study tool) :** To check the questionnaire's validity, the following validity tests were carried out:

- **External validity**

The questionnaire was edited by a group of editors with what suits the nature of the study.

- **Internal Validity**

This was done through measuring Pearson correlation coefficient between each statement and the dimension it belongs to. Results are shown in Table 2 below:

Table 2. Measuring Internal Validity of the Second Section' Statements about the Requirements of E-learning.

Variable	Statementn umber	Correlation Coefficient	Significanc elevel	Variable	Statementn umber	Correlation coefficient	Significanc elevel
E-learning requirements	1	0.616**	0.000	E-learning requirements	16	0.586**	0.000
	2	0.610**	0.000		17	0.699**	0.000
	3	0.616**	0.000		18	0.587**	0.000
	4	0.597**	0.000		19	0.771**	0.000
	5	0.297**	0.002		20	0.870**	0.000
	6	0.575**	0.000		21	0.599**	0.000
	7	0.658**	0.000		22	0.587**	0.000
	8	0.587**	0.000		23	0.587**	0.000
	9	0.433**	0.000		24	0.599**	0.000

	10	0.368**	0.000		25	0.771**	0.000
	11	0.699**	0.000		26	0.671**	0.000
	12	0.587**	0.000		27	0.587**	0.000
	13	0.699**	0.000		28	0.587**	0.000
	14	0.587**	0.000		29	0.657**	0.000
	15	0.699**	0.000		30	0.528**	0.000

Table (2) shows that all Pearson correlation coefficients between the second section's items about e-learning requirements and the global degree of the section is a statistical function at the significance level 0.05 and 0.01. Thus, all the section's items are internally valid.

Table 3. Measuring Internal Validity of the Third Section's Statements about Higher Education Enhancement

Variable: Highereducationquality	Statementnumber	Correlation Coefficient	Significance level	Variable: Highereducationquality	Statement number	Correlation coefficient	Significance level
providing flexibility dimension	1	0.657**	0.000		13	0.352**	0.000
	2	0.721**	0.000		14	0.349**	0.000
	3	0.647**	0.000		15	0.253**	0.009
	4	0.689**	0.000		16	0.351**	0.000
	5	0.670**	0.000	content updating dimension	17	0.722**	0.000
	6	0.534**	0.000		18	0.722**	0.000
	7	0.479**	0.000		19	0.304**	0.002
activating the learner and instructor roles' dimension	8	0.457**	0.000		20	0.722**	0.000
	9	0.249*	0.010		21	0.438**	0.000
	10	0.722**	0.000		22	0.699**	0.000
	11	0.834**	0.000		23	0.523**	0.000
	12	0.225*	0.021		24	0.420**	0.000

Table 03 shows that all Pearson correlation coefficients between items about higher education enhancement and the global degree of the section are a statistical function at the significance level 0.05 and 0.01. Thus, all of the

items' dimensions of the third section are internally valid with the dimension they belong to; this proves the internal validity of the items of this section.

- **Questionnaire consistency**

To measure the study tool consistency, the researchers relied on Cronbach's alpha equation. The following table shows consistency coefficients of the questionnaire's sections and its global consistency.

Table 4. Consistency Coefficients of the Questionnaire and its Sections

Section	Number of Items	Cronbach's alpha coefficient
Section Two: E-learning Requirements	30	.914
Section Three: Higher Education Quality Enhancement	24	.677
The Questionnaire as a Whole	54	.765

Source: authentic based on SPSS findings

Table 4 results show that consistency coefficients indicate the high consistency coefficient of the study tool; this proves the tool's ability to achieve the study objectives.

6.3. Data Statistical Processing Styles

To reach the study objectives, data analyses, and hypotheses testing, the researchers relied on SPSS where the following statistical styles were used: frequencies and percentages, arithmetic mean, standard deviation, and Chronbach's alpha test to determine the questionnaire's consistency.

7. Data Exposition and Analysis

7.1. Exposition and Analysis of the First hypothesis' data about the Responses of the Respondents on the Availability of E-learning Requirements at the University.

Table 5. Respondents' Answers about the Availability of E-learning Requirements at the University.

No.	Items	Arithmetic mean	Standard deviation	Agreement degree
1	The university provides continuous access to internet	1.22	.420	Very weak
2	The university provides communication devices that meet the requirements of e-learning	1.53	.500	Very weak
3	The university has a website that students can	1.46	.500	Very weak

	connect with at any time			
4	The university has equipped rooms for e-learning in the pedagogic spaces	1.53	.500	Very weak
5	There are computer labs equipped with all what is needed to realize electronic education	1.37	.487	Very weak
6	The existence of a number of computer science technicians to provide help for the actors of the educational process	1.99	1.03	Weak
7	The university has electronic libraries to allow access to various references	1,53	.500	Very weak
8	The vision is clear about how to interact electronically between learners and the faculty members	1.38	.489	Very weak
9	There are criteria for learners' evaluation in e-learning	1.14	.350	Very weak
10	E-learning at the university is a system that is clear so far	1.57	.815	Very weak
11	There are training programs for learners and instructors on e-learning and distant education	1.55	.873	Very weak
12	There is a guide that includes the important information about e-learning	1.22	.420	Very weak
13	The university works to hold meetings with learners and instructors to explain e-learning	1.14	.350	Very weak
14	The university holds meetings about the effectiveness of e-learning	1.22	.420	Very weak
15	The university provides a space for educational debates	1.14	.350	Very weak
16	The university provides the opportunity for tracking and electronic assessment	1.22	.420	Very weak
17	The university has an activated database for e-learning	1.14	.350	Very weak
18	The university provides a space for students to submit their works electronically	1.22	.420	Very weak
19	The university works top activate the virtual classes	1.14	.350	Very weak
20	The university provides spaces for distant interaction between the actors of the educational process	1.06	.249	Very weak
21	The university provides real spaces for electronic exams	1.21	.414	Very weak

22	The university uses multimedia that allow watching, listening, and interactive answer	1.14	.350	Very weak
23	The university enables the student from participating audio-visually and through written and voice chat	1.14	.350	Very weak
24	The university provides the sufficient material resources for e-learning	1.21	.414	Very weak
25	The university provides trainings on distant education software	1.06	.249	Very weak
26	The university immediately handles the technical obstacles when contents are uploaded	1.14	.350	Very weak
27	Access to educational websites is easy	1.14	.350	Very weak
28	The university provides the opportunity for virtual meetings between learners and instructors	1.14	.350	Very weak
29	The university provides the opportunity for periodic online meetings of the pedagogic committees and scientific organizations	1.37	.487	Very weak
30	The university updates its website continuously	1.21	.487	Very weak
The global arithmetic mean of the respondents' answers		**1.29**		

Table 5 shows the arithmetic means and agreement degree of each item of the questionnaire about the availability of e-learning requirements at the university. Agreement degrees range between very weak and weak throughout all the questionnaire's items. The global arithmetic mean reached 1.29 which means very weak; thus, we conclude that the first hypothesis is confirmed.

7.2. Exposition and Analysis of the Second Hypothesis' data about the Respondents' Answers to the Questionnaire's Items about the Role of E-learning in providing flexibility in higher education.

Table 6. Respondents' Answers about the Role of E-learning in Providing Flexibility in Higher Education.

No.	Dimension	Items	Arithmetic mean	Standard deviation	Agreement degree
1	Providing flexibility	E-learning overcomes conventional education problems	4.04	.722	High
2		The learner's age can be overcome in e-learning	3.54	.937	Very weak
3		It can face the time issue in the process of learning and teaching	3,88	.796	Average
4		It can provide the scientific content in an exciting way	4.02	.723	Average
5		E-learning takes less time in learning and teaching	3.86	.805	Average
6		It enables the learner to communicate with the instructor via email anywhere at any time	4.14	.623	Average
7		It can overcome the geographic limitations of the learners and instructors	4.28	.700	High
Global arithmetic mean			**3.97**		

Table 06 shows the arithmetic means and agreement degree for each item from the dimension of providing flexibility from the point of view of faculty members. Their answers range from high to very high. The arithmetic mean reaches 3.97 with a high agreement degree (limited to the interval 3.4-4.20). Thus, we conclude that the second hypothesis is confirmed.

7.3. Exposition and Analysis of the Third Hypothesis about the Respondents' Answers to the Questionnaire's Items about the Role of E-learning in Activating the Learner's and the Instructor's Role.

Table 7. Respondents' Answers about the Role of E-learning in Activating the Learner's and Instructor's Roles.

No.	Variable	Dimension	Items	Arithmetic mean	Standard deviation	Agreement degree
8	Hig	Acti	E-learning contributes to increasing interest in lesson planning	4.20	.789	Very high

9			It contributes to changing the learner and instructor roles with what goes with the modern educational objectives	4.29	.816	Very high
10			It encourages learners to participate rather than just listening	4.35	.635	Very high
11			It contributes to acquiring the necessary skills and competencies for ICT use	4.66	.402	Very high
12			It fosters interaction between the learner and the instructor	2.94	.848	average
13			It fosters communication and participation in virtual forums and debates	3.91	.986	high
14			It develops the learner and instructor research skills and competencies	4.43	.632	Very high
15			It contributes to acquiring updated news in a brief time	4.29	.661	Very high
16			It provides immediate feedback	4.47	.692	Very high
Arithmetic mean of activating the learner and instructor roles dimensions				**4.17**		

Table 07 shows the arithmetic means and agreement degree of each statement of the dimension of activating the learner's and instructor's roles from the perspective of the teaching staff. Agreement degrees are generally "very high". The global arithmetic mean of the respondents' answers about the role of e-learning in activating the role of the learner and instructor reaches 4.17 with a very high agreement degree (limited to the interval 3.4- 4.20). Thus, we conclude that the third hypothesis is confirmed.

7.4. Exposition and Analysis of the Fourth Hypothesis Data about the Respondents' Answers to the Items about the Role of E-learning in Updating the Programs and Syllabi

Table 8. Respondents' Answers about the Role of E-learning in Updating the Contents of Programs and Syllabi.

No.	Variable	Dimension:	Items	Arithmeticmean	Standard deviation	Agreement degree
17	Highereducation	Updating the content of	E-learning helps updating the courses content in a brief time	4.54	.571	Very high
18			It can update information and curricula with what meets the learning/teaching process	4.54	.571	Very high
19			It fosters accessibility to the content at any time	3.91	.986	high

20			It provides various sources of information	4.54	.571	Very high
21			It provides the opportunity for different databases access	2.66	1.22	average
22			It helps keep pace with scientific innovations	4.47	.692	Very high
23			It provides various teaching styles (conferences, email, chat rooms)	3.88	1.34	high
24			It provides exciting content that is immediate and updated	2.54	1.13	Weak
Arithmetic mean of programs and syllabi content updating dimension				**3.68**		

Table 8 shows the arithmetic means and agreement degree of each item of programs' and syllabi's content updating dimension. Agreement degrees were mainly in the degree "high". The arithmetic mean reaches 3.68 with a high agreement degree (limited to the interval 3.4- 4.20). Thus, we conclude that the fourth hypothesis is confirmed .

8. Discussion

8.1. Results Related to the First hypothesis

Results indicate that there is a very weak level of the e-learning requirements' availability at the Algerian university. Despite the efforts made by the authorities, we can say that they are just attempts that are very far from realizing this necessary objective that is imposed by the environmental, local, and international variables. The classical ways of teaching could not cope with the current challenges. Yet, the Algerian university still uses old techniques in the administration and pedagogic activities. The infrastructure of higher education institutions is not up to the expectations of the university community due to the scarcity of material, technical, artistic and human resources. Apparently, the current environment does not allow turning into e-learning; and trying to adopt the latter under such circumstances is a waste of time and efforts.

8.2. Results Related to the Second Hypothesis

E-learning highly provides flexibility in higher education as it provides the opportunity to learn by providing and transmitting the information with the possibility of overcoming the problem of classical ways of teaching . Means et al. (2009) confirm that this type of education can provide more flexibility through access to educational content at anytime and anywhere in an exciting way through the various techniques available on the educational software. (as cited in (Jethro, Grace, & Thomas, 2012, p. 205) This facilitates content transmission smoothly and makes education an ongoing process for those who want. Generally, technology is used to increase flexibility using very beneficial mechanisms that allow various activities at the same time. Hence, e-learning is very flexible as it provides the learner with the opportunity to create content

and helps the teacher enrich the educational practices with the chances of adapting and interacting with the different educational styles. The flexibility provided by this type of education facilitates access to studies for new wide audience and permits life-long access so that everybody can take advantage of the university. Thus, all society layers (workers, poor people…) can access and be open to the university. Furthermore, e-learning allows learners to learn and acquire new skills without exposure to undesired situations as in the classroom education. Thus, flexibility is provided for the different educational processes that enable enlarging the chances and opportunities for learners and instructors and all the actors of the educational process. Moreover, e-learning paves the way for more control of education through a set of various educational styles and interactions. It opens the door for learning at anytime for everybody and everywhere through various styles based on ICTs that allow written, animated, and audio-visual styles. This increases excitement and smoothes the educational process and reaches efficacy with the least amount of costs. Therefore, the quality of education is enhanced. Importantly, the results of the current hypothesis are in conformity with those of other researchers like Kasworm (2011). He agreed that e-learning allows flexibly in learning and accessing materials according to students‟ needs and provides more interactive materials that allow easy access to information and feedback from students. (Ayu , 2020, p. 48)

8.3. Results Related to the Third Hypothesis

E-learning contributes highly to activating the role of the learner and instructor. According to Nakajima (2006), e-learning is a system that is designed to enhance the performance of the instructors and their self-organization, in addition to motivating them. Interestingly, the different designs and services aim at backing up the instructors to teach effectively in the electronic environment. They also allow innovation and invention in education.(as cited in (BJEKIĆ, Čača , & Čačak , 2010, p. 203).This helps diversifying the roles of the learner as well as the instructor. Basically, the learner can self-study and gain more skills in planning learning with his goals, characteristics, and needs. He can also play an active role in education through participation in the various automatically organized activities that may be very beneficial for him. In this way, he can also participate in teaching not only receive the information from lessons and presentations. (Yengin, Dilek, Karahoca, & Yücel, 2010, pp. 5776- 5777). In this regard, studies made by Pr. Schutte Gjerald confirm that learners who rely on e-learning outperform learners who rely on the classical ways despite the fact that the same courses and exams were provided for the two categories. The reason behind this is because e-learning is characterized by the simulation of the classroom education as it enables learners to master the educational content that is designed according to the skills they are expected to have. Moreover, such education enables the ongoing development and performance enhancement. It

also opens the stage for sharing experiences and exchanging views by the educational process actors; this makes a qualitative leap in the learner's and instructor's roles.

8.4. Results Related to the Fourth Hypothesis

E-learning contributes highly to updating the content of programs and syllabi. It helps enriching the content of the programs and updating them with what goes hand in hand with the challenges of the current era through drawing contents from pioneering international universities that have much experience in distant education. This shall allow us to take advantage of their experience and paves the way for different databases access and digital libraries in a brief time. Furthermore, it facilitates information access and developing and boosting the curricula and syllabi.

Conclusion

Higher education with all its different components cannot be separated from the social, economic, cultural, and technological developments. Therefore, speaking about its development and outcomes enhancement must take into consideration all the changes that occur in the current world. As far as distant learning at the Algerian university is concerned, it is still early to bring it to the fore due to the lack of its requirements. In other words, the current academic environment with all its material, human, and technical components cannot realize the objectives of the so-called e-learning. However, one should consider those attempts as a positive step towards meeting the standards of real e-learning. Undeniably, there must be a serious and clear strategy that specifies the objectives and goals; in addition to collaboration in order to develop the quality of higher education in Algeria via e-learning.

Recommendations

- E-learning softwares and the different technologies must be provided.
- Human capital training must be carried out in order to shift towards distant education.
- Collaboration and experience sharing with the pioneering countries in e-learning must be a priority.
- E-learning requirements, equipments, software, and hardware must be provided in addition to training and maintenance.
- A clear strategy for the shift towards e-learning must be adopted and ICTs must be taken advantage of in order to create a suitable environment.
- Raising awareness about the importance of e-learning and ways of taking advantage of it must be taken into consideration at the level of higher education's institutions.

Bibliographie

Alemu, S. K. (2018). THE MEANING, IDEA AND HISTORY OF UNIVERSITY/HIGHER EDUCATION IN AFRICA: A BRIEF LITERATURE REVIEW. *FIRE: Forum for International Research in Education, 4*(3), 210-227.

Jethro, O. O., Grace, A. M., & Thomas, A. K. (2012, January). E-Learning and Its Effects on Teaching and Learning in a Global Age. *International Journal of Academic Research in Business and Social Sciences, 2*(1), 203-2.

Yengin, I., Dilek, K., Karahoca, A., & Yücel, A. (2010). Roles of teachers in e-learning:How to engage students & how to get free e-learning and the future . *Procedia Social and Behavioral Sciences, 2*, 5775–5787. doi:10.1016/j.sbspro.2010.03.942

Abel , U., & Abbas , A. (2008). Conceptualising Quality E-learning in Higher Education. *E–Learning, 5*(1), 75-88.

Ayu , M. (2020, May). ONLINE LEARNING: LEADING E-LEARNING AT HIGHER EDUCATION. *The Journal of English Literacy Education, 7*(1), 47-54.

BJEKIĆ, D., Čača , S., & Čačak , S. (2010, January). TEACHER EDUCATION FROM E-LEARNER TO E-TEACHER: MASTER CURRICULUM. *TOJET: The Turkish Online Journal of Educational Technology, 9*(1), 202-212.

Sârbu , R., Anca , G. I., Enache, A. C., & Dumitriu, D. (2009). The Quality of Educational Services in Higher Education – Assurance, Management or Excellence? *Quality Management in Services, 11*(26), 383-392.

Nagwa, S. (2014). Using E-Learning to Develop EFL Students' Language Skills and Activate Their Independent Learning. *Creative Education*(5), 752-757. doi: http://dx.doi.org/10.4236/ce.2014.510088

Wani, H. A. (2013). The Relevance of E-learning in Higher Education. *Jurnal Kajian Pendidikan, 3*(2), 181-194 .

Chérif , M., & Azouz , M. (2018). The Impact of Using E-learning as a means to Enhance the Quality of Higher Education in Algeria : A Field Study of Msila University. *MÂAREF Journal , 13*(1), 175-211.