The integration of e-learning in the Algerian tertiary level: The case of Biskra University

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Abstract: In this new Age of the digital technology, it is of tremendous importance for higher education in Algeria to work hard for the purpose to narrow the huge gap between the reality they face and live in and the potential of the new technologies in order to keep abreast with the standard norms of modern education. Undoubtedly, some uses of the digital technologies are quite promising but require substantial reorganisation and rethinking of the roles of the individuals and institutions. In the sphere of this problematic, in the present work, we purport to explain the gap between the existing, prevailing reality of the Algerian universities and the expectations of the effects of the digital technologies in the academic world of higher education. In precise terms, this paper will tackle the question of to which extent the Algerian universities are prepared to implement and use the new technologies as part of their current practices for the purposes they can serve, and discuss the challenges and problems the institutions in higher education are facing to place information and communication technologies as central to teaching and learning.

Keywords: digital technologies, ICTs, e-learning, higher education.

Résumé: Dans cette nouvelle ère de la technologie numérique, il est d'une importance énorme pour l'enseignement supérieur en Algérie à travailler dur dans le but de réduire l'écart énorme entre la réalité dont on est confronté et le potentiel des nouvelles technologies dans le but de se tenir au courant avec les normes standards de l'éducation moderne. Sans aucun doute, certains usages des technologies numériques sont très prometteurs mais nécessitent la réorganisation et de repenser les rôles des individus et des institutions substantielles. Dans la sphère de cette problématique, dans le présent travail, nous prétendons à expliquer l'écart entre l'existant, la réalité dominante des universités algériennes et les attentes des effets des technologies numériques dans le monde académique de l'enseignement supérieur. En termes précis, cet article abordera la question de savoir dans quelle mesure les universités algériennes sont prêtes à mettre en œuvre et utiliser les nouvelles technologies dans le cadre de leurs pratiques actuelles pour les fins qu’ils peuvent servir, et de discuter des défis et des problèmes des institutions de l’enseignement supérieur. Aussi,

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il sert à permettre à ces technologies de l’information et de la communication de devenir un élément central de l’enseignement et de l’apprentissage.

Mots Clés : technologies numériques, TIC’s, e-learning - enseignement supérieur.

1. Introduction

In Algeria, employing the new digital technologies efficiently and effectively is still backward. What is, therefore, significant in reality is that the national institutions at the tertiary level do not possess the appropriate infrastructure for utilising the wide spectrum of the technologies’ capabilities, nor do they possess a clear policy and its inherent strategies to implement such technologies in order to enable them to operate on the ground. Worse, the majority of practitioners, and at all levels, in higher education are unprepared and less qualified to adopt and use the digital technologies because they have not sought for to change their traditional and outmoded own methods and practices. Those latter are seen not to meet the exigencies and requirements of the present time and the future. Inside this reality, the present paper will tackle the question of to which extent the Algerian universities are prepared to implement and use the new technologies as part of their current practices for the purposes they can serve, and discuss the challenges and problems the institutions in higher education are facing to place information and communication technologies as central to teaching and learning.

2. The Theoretical Background

Technology affects nowadays practically most activities in our daily life. The new digital technologies have impacted the way we communicate with each other. This influence has changed the speed of production and distribution of knowledge. Thus, the new challenge of these new technologies in higher education institutions worldwide is to redefine every component that makes-up these bodies: student constituencies, partners’ competitors, infrastructures, and teaching /learning practices (GURI-ROSEMBLIT, 2009).

The digital technologies are applied in higher education institutions in teaching/learning practices for a variety of purposes: information retrieval from periodicals, books, newspapers, and other information resources; simulations and multimedia presentations; communication with instructors in- and after classes; communication amongst students; drilling exercises and sample tests; reading notice boards, class administrations, etc. Furthermore, the information and communication technologies have a huge impact on other important areas of university activities such as, library management; management registration and loan administration; enhancement of research communities, academic publishing; mobility and cooperation between institutions. Significantly, the applications of technologies in the above-mentioned areas have nothing in common with the traditional roles of the current ways of education (ibid).

Inside the broad and complex sphere of digital technologies, e-learning has emerged, in all educational levels, as a new way to offer attractive and practical uses for learners of all ages and various interests and needs. The term e-learning encompasses many teaching approaches, types of technologies, and administrative practices. Etymologically, it originates from electronically-assisted learning, or learning with and through the use of technologies. Other commonly used terms include online learning, computer-assisted learning, or ICT in education (OLSEN et al., 2011). That is, e-learning is about the use of
electronic media for a variety of learning purposes that range from supplementary functions in classrooms to face-to-face meetings by online encounters (MUNRO&MCMULLIN, 2009).

The advantage of the use of e-learning is to create pedagogical opportunities that were impractical or even impossible, to implement in the traditional educational contexts. It also generates options for participation that are independent of time and place (ibid). In a specific focus, e-learning pertains to a range of applications of technology in support of teaching and learning, including materials and activities delivered via internet, a local intranet, or via CD-ROM. In this sense, e-learning refers to any type of learning using electronic means of any kind. Some examples of these concern TV, radio, CD-ROM, DVD, cell phone, personal organiser, internet, etc., but in most publications, it is used mainly to denote online learning through the web.

3. E-learning and the Algerian context

In Algeria, the adoption of e-learning is considered necessary for the development of the country. There is general agreement that the adoption of this new technology may be partly responsible for the society’s renaissance and rise in a multitude of domains. Indeed, policy makers and deciders have realized the critical importance of e-learning for educational, economic and social development. In their view, e-learning is key component of the large challenge of educating the next generations and creating a knowledge-centered economy that makes the country keep abreast with the requirements of the world of today and tomorrow. Labbas and Al Shaban (2013) observed that Algeria, like most developing countries, is aware and convinced to implement e-learning. In their argument, e-learning can provide the country with interesting opportunities to enter into the information society and therefore blend into the world of economic welfare and social well-being.

When it comes to shed light on the integration of e-learning in higher education in Algeria, the potential of this technology to affect education in this sector is thus significant. Broadly, there are key roles that e-learning plays to promote tertiary education. For instance, e-learning is a good means which can yield possibilities for university students to learn best when interactively engaged in their subject matter since it is easier through e-learning to access to knowledge and science. Moreover, using this modern instrument enables these university students to gain confidence, self-esteem, and renewed motivation. This is so because with this advanced tool, the pedagogy often shifts from a traditional teaching/learning approach, based on a teacher classroom, to a more learner-centered environment. At another level, educators and instructors become more independent, creative, and motivated to deliver knowledge and interact with students. A strategy often seen as appropriate to the recent teaching approaches and methods. Its advantage is that it helps the teachers become more efficient and performing.

Nevertheless, when examining the linkage between these roles and challenges in the era of the digital age and the prevailing reality of higher education in Algeria, the important remark to note is that the implementation of e-learning is still at its first steps; or rather, let us say, it is very backward in comparison to the achievements on the same matter realized by the developed world.
4. E-learning in the Algerian higher education context: challenges and problems

There is no doubt that the integration of ICTs in education in general and in (English) language teaching and learning in particular has opened new horizons. ICTs make students more motivated, both inside and outside formal educational contexts, finding more freedom and entertainment; ICTs provide learners with authentic material via their direct contact with age and class mates; and they help teachers to use different multimedia devices and exchange knowledge and sources with other partners (BENSAFA, 2015, P.50). However, the rapid spread of ICTs throughout the world and the need for promoting higher education in Algeria have raised two challenging questions: are teachers and students trained to adapt to the current situation of e-learning? Are teachers really involved in the process of the present Higher Education reforms?

One of the answers to the former question has been attained through a study carried out by Lekkam and Benabou (2015) which investigated the importance of the ICT and its impact on the teachers' acquired skills. The study was based on the background that the LMD system has been implemented to improve teaching quality through the incorporation of ICT in our schooling system; that the use of ICT in education has led to focus on learners rather than teachers; that ICT provides new means to explore learning strategies in order to advance and build skills; and that ICT has brought into our context new roles for teachers and new pedagogies. In their conclusion, Lekkam and Benabou stated that «In schools, ICT have often the role of facilitating the elements of a more mechanical part of the teachers’ work, especially in terms of managing and preparing their courses. The rapid development of ICT forces us to train both teachers and students in new skills that allow adapting to new learning situations. Yet, it appears that the adaptation to the use of ICT in class is too slow. For that reason, universities should take responsibility to define the concerned skills in university courses; focused primarily on their fundamental values and goals" (P.136).

An important answer to the latter (question) has been offered by Naouel Abdellatif Mami (2013) in a paper (study) in which she proposed some reflections on practicing technology-based ELT. She emphasized the need for technology methods and their role in developing people and pedagogies, with an intent to develop a clear and a better understanding of using ICT to encourage the authenticity of the teaching and learning practice. According to Mami (ibid: 389), though the aim of fostering and launching the Internet, alongside higher education reforms, was to embed e-learning, to meet the learners' needs and aspirations, and to support lifelong learning,

Insufficient knowledge of how to manipulate this new data, coupled with a lack of involvement in the reform process made it difficult to succeed in building a platform for a structured use of ICT in ELT. Traditional use of teaching patterns has remained unchanged with the lack of new syllabi that meet the needs of e-learning.

She (ibid:390). continues to say that English language instruction lacks a focus on dealing with Information and Communication Technology means, and that the reason behind this deficiency may refer to the utter absence of teachers ‘exposure to up to date methods of teaching using ICT.'
What can be concluded from both answers is that teachers and students should be trained to facilitate the use of ICT and benefit from new skills in order to cope with the current situation. They should also assume their responsibility to take part in the reform process so as to structure their use of ICT in terms of the Ministry or university ultimate goals. Guerza (2015: 982), after an interesting experience with the implementation of ICT means to foster EFL learners’ speaking proficiency in El Hadj Lakhdar University in Batna, avowed that "ICT in our EFL settings has become an undeniable reality that has established itself as a necessary tool for the dissemination of knowledge and EFL skills".

5. The study
5.1. Methodology
The researchers opted for the descriptive method to acquire and gather data for this study. They derived data from the targeted participants; i.e., the teachers of the English Section in the University of Biskra. Other data were collected through the review of literature of different studies on relevant topics. The results obtained in this study were discussed and analyzed to provide comprehensive answers to the questions raised earlier.

5.2. Participants
The population in this study consisted of thirty-five (35) full time teachers at the Section of English in the University of Biskra. Out of the 35 teachers, only six (06) teachers were available and showed willingness to answer the questionnaire. It is worth noting that in this study, the sample of the respondents was selected randomly and the researchers did not seek generalization.

5.3. Data collection
In order to collect data, a semi-structured questionnaire was administered. The choice of a semi-structured questionnaire was due to the nature of the method of the study. This implies that the researchers were more interested in participants’ opinions and attitudes towards the research problem so as to gain insightful feedback.

5.4. Data analysis
To analyse the results of the questionnaire for teachers, quantitative and qualitative procedures were employed. For the close-ended question-items, numerical interpretations were adopted; however, for the open-ended question-items were used.

6. Results and discussion
Section One: About You
Table 1. Background Information
The table above indicates that the majority of teachers are young and inexperienced. Three of them are male and the rest are females.

**Section Two: Use of Technology**

*Table 2. Time frequency in using technology per day*

<table>
<thead>
<tr>
<th>Time</th>
<th>30mn-1,30 hours</th>
<th>1,30-3 hours</th>
<th>+3 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>02</td>
<td>02</td>
<td>02</td>
</tr>
</tbody>
</table>

The table above shows that the majority of teachers do not exceed three (03) hours using technology per day.

*Table 3. Time frequency in entertainment per day*

<table>
<thead>
<tr>
<th>Time</th>
<th>30mn-1,30 hours</th>
<th>1,30-3 hours</th>
<th>+3 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>02</td>
<td>03</td>
<td>01</td>
</tr>
</tbody>
</table>

The table above displays that the majority of teachers spend from one and a half (1, 30) to three (03) hours using technology for entertainment per day.

*Table 4. Time frequency used for research*

<table>
<thead>
<tr>
<th>Time</th>
<th>30mn-1,30 hours</th>
<th>1,30-3 hours</th>
<th>+3 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>02</td>
<td>03</td>
<td>01</td>
</tr>
</tbody>
</table>
The table above indicates that the majority of teachers spend from one and a half hours (1, 30) to three (03) hours using technology for research per day.

Section Three: You’re Attitudes towards Technology

Table 5. Using technology

<table>
<thead>
<tr>
<th>Using technology is a good way to teach</th>
<th>Agree</th>
<th>Disagree</th>
<th>I do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>06</td>
<td>00</td>
<td>00</td>
</tr>
</tbody>
</table>

From the results above, we can notice that all the teachers agree that using technology is a good way to teach.

Table 6. Programmes to teach online

<table>
<thead>
<tr>
<th>There are many programmes to teach online</th>
<th>Agree</th>
<th>Disagree</th>
<th>I do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>05</td>
<td>01</td>
<td>00</td>
</tr>
</tbody>
</table>

From the results above, we can observe that most of the teachers agree that there are many programmes to teach online.

Table 7. Using a computer in lectures

<table>
<thead>
<tr>
<th>It is practical to deliver lectures using a computer</th>
<th>Agree</th>
<th>Disagree</th>
<th>I do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>05</td>
<td>01</td>
<td>00</td>
</tr>
</tbody>
</table>

From the results above, we can see that most of the teachers agree that it is practical to deliver lectures using a computer.

Table 8. Assessing students online

<table>
<thead>
<tr>
<th>It is practical to assess students online</th>
<th>Agree</th>
<th>Disagree</th>
<th>I do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>00</td>
<td>04</td>
<td>02</td>
</tr>
</tbody>
</table>

From the results above, we can notice that the majority of the teachers do not believe in online assessment.

Section Four: Experience with E-learning

Table 9. Knowing e-learning
From the results above, we can observe that all the teachers know e-learning.

Table 10. Implementing e-learning

<table>
<thead>
<tr>
<th>Have you heard of e-learning before?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>06</td>
<td>00</td>
</tr>
</tbody>
</table>

From the results above, we can see that most of the teachers find it a good idea to implement e-learning in the Algerian universities.

Table 11. Preparedness for e-learning

<table>
<thead>
<tr>
<th>Do you think that it is a good idea to implement e-learning in the Algerian universities?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>04</td>
<td>02</td>
</tr>
</tbody>
</table>

From the results displayed in the table above, it is noticeable that most of the teachers find that the Algerian universities are unprepared to implement e-learning.

Table 12. Status of e-learning

<table>
<thead>
<tr>
<th>Do you think that the Algerian universities are backward in the use of e-learning?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>04</td>
<td>02</td>
</tr>
</tbody>
</table>

From the results displayed in the table above, it is noticeable that most of the teachers find that the Algerian universities are backward in the use of e-learning.
Section Five: You’re Attitudes towards E-learning

Table 13. Teachers’ Attitudes

<table>
<thead>
<tr>
<th>Questions</th>
<th>Teachers’ Attitudes</th>
</tr>
</thead>
</table>
| 1. In your point of view, why have higher education institutions failed to keep abreast with the use of technology in the developed countries' universities? | * Misuse of the Net.  
* Lack of necessary logistics and infrastructure.  
* Unskilled teachers.  
* Large and crowded classrooms. |
| 2. In your point of view, what should Algeria do to successfully implement e-learning in its higher education? | * Propagation of e-learning at all levels.  
* Need for teachers’ pre-service training.  
* Sensitizing teachers and students. |
| 3. Are there any other remarks or suggestions you would like to add? | No more remarks or suggestions |

7. Conclusion

To conclude, from the above literature review and the results obtained in this study, the use of ICTs in general and e-learning in particular has become necessary to cope with the new situation prevailing in higher education worldwide. Nevertheless, the bulk of Algerian universities are still utilizing traditional teaching/learning practices. This is due to many reasons: resistance to change, unqualified teaching staffs, lack of adequate infrastructures, and the non-existence of clear political and pedagogical strategies for the implementation of e-learning. This has been confirmed by the investigation of teachers’ perceptions of, and attitudes towards, this topic in our department.

References


expectations and actual effects. New York: Nova Science.


Appendix

Questionnaire for Teachers

Dear colleague,

Would you please fill in this questionnaire to help the researchers to gain feedback on the use of technology via e-learning in the classroom? The aim of this study is to get teachers' attitudes towards e-learning in the context under investigation.

Section One: About You

*Please, circle your answer*

1. Age: 20-30 30-40 + 40

2. Gender: Male Female

3. How long have you been teaching at the tertiary level? 0-10 10-20 +20

Section Two: Your use of Technology

*Please, circle your answer*

1. How much time do you (usually) spend every day using technology
   
   30 mn-1.5 hours 1.5-3 hrs +3 hours

2. How much time do you (usually) spend every day to entertain yourself? .................

3. How much time do you (usually) spend every day for research?
   
   30 mn-1.5 hours 1.5-3 hrs +3 hours

Section Three: Your Attitudes towards Technology

*Please, tick (✓) as appropriate*

1. Using technology is a good way to teach

   Agree ........ Disagree .......... I don't know ............

2. There are many programmes to teach online

   Agree ........ Disagree .......... I don't know ............
3. It is practical to deliver lectures using a computer

Agree ........ Disagree ........ I don't know........

4. It is practical to assess students online

Agree ........ Disagree ........ I don't know........

Section Four: Your Experience with E-learning

Please, tick (✓) as appropriate

1. Have you heard of e-learning before?

Yes ...... No ........

2. Do you think that it is a good idea to implement e-learning in the Algerian universities?

Yes ...... No ........

3. Do you think that the Algerian universities are prepared to use e-learning?

Yes ...... No ........

4. Do you think that the Algerian universities are backed in the use of e-learning?

Yes ...... No ........

Section Five: Your Attitudes towards E-learning

Please, provide your comments

1. In your point of view, why have higher education institutions failed to keep abreast with the use of technology in the developed countries' universities?

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2. In your point of view, what should Algeria do to successfully implement e-learning in its higher education?

3. Are there any other remarks or suggestions you would like to add?

THANK YOU FOR YOUR COLLABORATION