

Towards Integrating Mobile Learning in EFL Classes: Horizons and Limitations**GHEDEIR BRAHIM Mohammed**

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Abstract. The aim of this research work was to investigate the mobile learning adoption phenomenon in EFL classes in order to assess the different teaching/learning techniques that can be implemented in educational institutions in order to favor the penetration of this practice.

This study evaluated some of the possible methods, challenges and future potential of using this mobile devices in English classes and describes an empirical assessment of the effectiveness of M-learning in teaching and learning English as a foreign language.

In order to achieve this research work aims, two (02) questionnaires have been administered to twenty (20) teachers and sixty (60) students at the Department of English in the University of El-Oued, Algeria.

Keywords. EFL classes; Higher education; Mobile devices; Mobile learning.

Résumé. L'objectif de ce travail de recherche est d'étudier le phénomène d'adoption de l'apprentissage mobile dans les classes EFL afin d'évaluer les différentes techniques d'enseignement / apprentissage pouvant être mises en œuvre dans les établissements d'enseignement afin de favoriser la pénétration de cette pratique. Cette étude évalue certaines des méthodes possibles, les défis et le potentiel futur de l'utilisation de ces appareils mobiles dans les cours d'anglais et décrit une évaluation empirique de l'efficacité du M-learning dans l'enseignement et l'apprentissage de l'anglais en tant que langue étrangère. Afin d'atteindre les objectifs de ce travail de recherche, deux (02) questionnaires ont été administrés à vingt (20) professeurs et soixante (60) étudiants du Département d'anglais de l'Université d'El-Oued, Algérie.

Mots clés: cours EFL; L'enseignement supérieur; Appareils mobiles; L'apprentissage mobile.

1. Introduction

Information and Communication technologies (ICT) have become one of the most important factors for the development of society in the 21st century. The development of e-learning in education provides a way of new technologies in modern education and training systems.

The emergence of revolutionary technologies has had a significant impact on educational technology. It has increased the potential of e-learning as a mode of delivery of education. In essence, Mobile Learning, or M-learning as it is often called, is a relatively new tool in the pedagogical arsenal to assist students and teachers as they navigate the options available in the expanding distance learning world. M-learning is learning accomplished with the use of small, portable computing devices. These computing devices may include: smart phones, personal digital assistants (PDAs) and similar handheld devices.

By definition, mobile learning is the ability to provide educational contents and resources on personal pocket devices such as smart phones, tablets, i-pads, mobile phones, etc. Educational content refers to digital learning resources which includes any form of content available on a personal device. Thus, M-learning is defined as learning multiple contexts through social and content resources, using personal electronic devices.

The aim of this research work is to reflect and understand the position of mobile learning in EFL classes. It also attempts to assess some of the possible methods, challenges, and future potential of integrating mobile devices in English classes.

Institutions of Higher education together with teachers are always looking for effective teaching methods that place the student at the center of learning. Therefore, teachers are increasingly exploiting technology in the teaching they provide. However, as far as the context of the study is concerned, it is noticed that English teachers at the University EchahidHammaLakhdar of El-Oued, Algeria are not so enthusiastic and supportive to the use of mobile devices in EFL teaching and learning.

In order to achieve the study' s aims, the current study attempts to answer the following key questions:

- 1) – What is the impact of integrating mobile technology in EFL classes ?
- 2) – What are the teachers perceptions towards using mobile devices in EFL classes ?
- 3) – What are the students perceptions towards integrating mobile tools in English language teaching and learning ?
- 4) - What are the different barriers or obstacles that may hinder the integration of mobile instruments in EFL classes ?

2. Literature Review

2.1. The Impact of Technology in English Language Teaching and Learning

Technological advancements in computing and wireless communication together with the adoption of mobile multimedia devices and applications have translated into huge opportunities for English as a Foreign Language (EFL). Educators have recognized the potential of technology as an instructional tool in foreign language teaching and learning, and its application is increasing (Donmus, 2010). They asserted that technology is able to generate either collaborative or independent learning environment in which learners can practice and learn a new language.

In this framework, the combination of technology into language teaching and learning has become a daily event, and the educational multimedia courseware is produced largely as reference subjects to promote English language teaching and learning. Besides, the use of the Internet in English language teaching can be an effective teaching technique. It can be used as a pedagogical instrument aiming at improving English language teaching and learning (Maryam and Marlia, 2012: 57). The most widely employed Internet-based technologies in English language instruction is mainly Web 2.0 tools. The tools of Web 2.0 comprise blog, social network, wiki, and video conferencing have demonstrated the usefulness of the new technologies in English language teaching and learning.

To illustrate the merits of current technology in English language instruction, researchers have shown that wikis are very beneficial for learning and teaching as they provide collaborative writing (Cress and Kimmerle, 2008). Likewise, according to Alexander (2006), blogs or text formatted journal entries can improve learners' writing proficiency, promote active learning, and provide effective feedback for both students and teachers. Thus, blogs can be used to develop learners' writing and reading skills.

As mobile devices are part of new technologies, mobile phones, for instance, have various educational benefits to learning English as a foreign language as giving learners the opportunity to collaborate with each other, or connect with peers elsewhere. They can be used as notepads or as an alarm for setting study reminders. In addition, they can be recording devices, aiding students record impressions during field trips and create audio podcasts and blog posts. They can also be used for high-tech alternatives to boring classroom lectures, letting learners take part in interactive assignments like classroom polls (Sana, 2017: 120).

2.2. Factors Influencing M-Learning Adoption in Education

A variety of factors motivate both teachers and students to use mobile instruments in EFL classes. In order to use M-learning effectively, attention should be driven to the following key factors: the features of the devices, users' expectations, and pedagogical advantage(s) (Ligi et.al, 2017: 3).

Features of the devices were subcategorized into three(03) aspects: usability, functionality, and privacy. As M-learning tools are small, light and portable, these make them usable. Based on the previously stated criteria of mobile devices, learners feel comfortable while using them in the process of learning. This sense of freedom makes the process of transmitting knowledge flexible and can be carried out anytime and anywhere. Besides, mobile learning is functional since it satisfies learners' needs to get certain information fast. They can also access to learning materials and interact with other learners and instructors at various places and in a variety of situations and locations. Finally, mobile devices offer learners a sense of privacy. M-learning provides learners their special sphere to learn independently in a safe and motivated atmosphere (Ligi et.al, 2017: 3-4).

Users' expectations are central in M-learning adoption in EFL classes. This new type of learning satisfies learners' expectations for it opens up the opportunity for them to be at the heart of the learning process, play an active role beginning from determining their objectives until the evaluation stage. Once they are actively involved in the process of learning, they are more likely to develop learning strategies that will enhance their learning development and motivate them to be fully engaged.

Technology Acceptance Model (TAM) is one of the well-known models related to acceptance of technologies which was originally proposed by Davis in 1986. The concept of TAM is to provide a theoretical basis to describe behavioral intentions attitude toward use, external variables impact, internal beliefs and the usage of actual system (Legris, Ingham, & Collette, 2003). TAM also proposed that external factors affect actual and intention use through mediated effects on perceived ease of use and perceived usefulness (Davis, 1989). Perceived ease of use refers to the degree to which prospective user expects that using a particular service would be free of effort while perceived usefulness is defined as the degree to which an individual perceives that using a particular system would enhance their performance (Davis, 1989). In the light of this, the basic structures of TAM therefore are adopted as the key foundation for our research model.

Some of the pedagogical benefits of inserting mobile devices in English teaching and learning are: (1) flexible learning, (2) collaborative learning, (3) blended learning, and (4) interactive learning. Furthermore, it aids learners to improve literacy and numeric technical skills, recognize their current abilities, and can be used for autonomous and collaborative learning experiences. It also helps to raise self-esteem and self-confidence (Attewell and Webster, 2005). These pedagogical advantages foster the necessity of integrating mobile devices in EFL classes.

2.3 Mobile Learning Integration: Issues and Challenges

Numerous issues and challenges may undoubtedly appear in adopting mobile learning practice. Most issues and challenges are very much related to the features of mobile devices and a few regarding user's expectations.

The rapid increase of mobile applications has outpaced the traditional software applications. However, these traditional software engineering applications cannot be applied directly in mobile devices due to the following issues:

- (1) Different mobile platforms such as Android, Windows 7, etc.
- (2) Different hardware makers for platforms such as HTC, Google, Samsung, Apple, etc.
- (3) Mobile device user interfaces (UI) which provide a new mechanism for human computer interaction sequences such as multi-touch interfaces, image recognition, code scanning, etc., that have not been previously explored in research and there is no existing established user interface guidelines.
- (4) M-learning may make it easier to fraud. M-learning users may use dishonest methods to take or copy something valuable from another person, this may make it easier to cheat.
- (5) Feeling of isolation, separation, or of being out-of-the-loop. The freedom offered by M-learning opens up opportunities for learner to work alone and isolated from other learners (Cited in Mohammed et al, 2016: 341).

3. Methodology Design

The current study is mainly descriptive. It describes the present situation of mobile technology use among EFL students and teachers at the Department of English in the University Echahid Hamma Lakhdar of El-Oued, Algeria. To achieve the present study objectives, a mixed method was adopted, encompassing both qualitative and quantitative analysis in order to verify the validity of the information being collected. Accordingly, it is believed that a consistent and reliable analysis of data must be carried out relying on both methods. As the purpose of this study is to investigate the mobile learning adoption phenomenon in EFL classes in order to assess the different teaching/learning techniques that can be implemented in institutions in order to favor the penetration of this practice, the qualitative approach seems to be appropriate as a part of this mixed-methods research. Besides, as the focus of the quantitative research is to represent the actual results derived from research instruments in terms of numbers and statistical results, quantitative approach also seems to be suitable as a part of this mixed-methods research.

3.1 Sampling

The subjects of the present study were purposefully chosen from the students of the second year English of the academic year 2017/2018, as they have the subject of Information and Communication Technology (ICT) that equipped them with rich theoretical and practical basis about the theme of M-learning. The sample consisted of sixty (60) students, both male and female.

The participants in the current study were also twenty (20) teachers of English, the entire population of teachers at the Department of English in the University of El-Oued, Algeria. Table (01) shows the details of the sample:

Table. 01: The sample(s) of the study

| Participants | Male | Female | Total number |
|---------------------|-------------|---------------|---------------------|
| Teachers | 13 | 07 | 20 |
| Students | 18 | 42 | 60 |

3.2. Data Gathering Tools: Description and Implementation

In order to achieve this research work aims, the main method of inquiry is two (02) questionnaires that have been administered to twenty (20) teachers and sixty (60) students at the Department of English in the University of El-Oued, Algeria. Both questionnaires include four (04) dimensions: usability of mobile devices, attitudes towards using them in teaching

and learning English, methodology and techniques of implementation, and challenges that might be faced in the integration of M-learning devices.

Both teachers' and students' questionnaire consisted of ten (10) statements in which they were asked to decide at which level they agreed with each statement, ranging from [1] agree [2] neutral [3] disagree.

Before administering data gathering tools, students' and teachers' questionnaires were tested and reviewed. Research instruments were afforded a trial run focusing on ten percent (10 %) of the sample population of the students (06 students), and twenty-five percent (25 %) of the sample population of teachers (05 teachers).

In order to verify the extent of questionnaires statements clarity, a checklist was attached with data gathering tools. The checklist comprises five (05) questions:

- (1) How long did it take you to complete the questionnaire ?
- (2) Were the instructions clear ?
- (3) Were any of the statements unclear or ambiguous ? If so, will you say which and why ?
- (4) Was the layout of the questionnaire clear and attractive ?
- (5) Any other additional comments ? (Bell, 1999)

The answers given by the sample population were taken into consideration, and some elements of the data gathering instruments were amended and modified. However, piloting data gathering tools have revealed that the overall study protocol is feasible. This small range study has demonstrated the effectiveness of a pilot study in identifying flaws in the questionnaires which after appropriate amendments can then be used in the full study. It has also given a clear vision of how to implement research instruments. The findings of this pilot study are represented in changing the wordings of some statements in students' questionnaire and reformulating others in teachers questionnaire to rise clarity, comprehensibility, and precision.

4. Data Analysis and Interpretation

The findings in (Table. 02) below reveal that a great proportion of the targeted students agreed that the integration of mobile devices has a positive impact on students' learning and learning achievement, raises students' motivation, and facilitates learning autonomy. According to most of them, teachers should use ICTs in teaching English as a foreign language as they have several merits in English teaching and learning without denying the fact that M-Learning devices may generate several drawbacks. (Statistical information in table. 02 below gives details of the students' questionnaire findings).

Table. 02: Students' perceptions towards the integration of mobile devices in English instruction.

| Statements | Agree | | Neutral | | Disagree | |
|--|--------|------------|---------|------------|----------|-----------|
| | N | P | N | P | N | P |
| 1. The integration of mobile technology has a positive impact on students' EFL learning. | 5 2 | 86.66 % | 6 | 10 % | 2 | 3.33 % |
| 2. Mobile learning integration motivates you to learn. | 5 1 | 85 % | 7 | 11.66 % | 2 | 3.33 % |
| 3. Teachers should use ICTs in EFL classes. | 5 4 | 90 % | 2 | 3.33 % | 4 | 6.66 % |
| 4. Mobile devices usage enhances your English communicative competencies. | 4 9 | 81.66 % | 8 | 13.33 % | 3 | 5 % |
| 5. M-learning adoption in EFL classes opens up the opportunity for you to be at the heart of the learning process. | 5 1 | 85 % | 7 | 11.66 % | 2 | 3.33 % |
| 6. M-learning has several merits in English instruction. | 5 4 | 90 % | 6 | 10 % | 0 | 00 % |
| 7. Mobile devices usage requires technical skills on the part of their users. | 5 8 | 96.66 % | 2 | 3.33 % | 0 | 00 % |
| 8. M-learning helps you to improve literacy and numeric technical skills, recognize your current abilities, and can be utilized for autonomous and collaborative learning experiences. | 4 8 | 80 % | 1 1 | 18.33 % | 1 | 1.66 % |
| 9. M-learning adoption in English instruction may generate several shortcomings. | 3 8 | 63.33 % | 1 3 | 21.66 % | 9 | 15 % |
| 10. Higher educational institutions should encourage and support the integration of mobile devices in English teaching and learning. | 5 0 | 83.33 % | 4 | 6.66 % | 6 | 10 % |

The results derived from teachers' questionnaire (see table. 03 below) demonstrated that both students and teachers share the same attitudes towards mobile learning integration in EFL classes. Most of the targeted teachers (60 %) favored the implementation of mobile technology in EFL classes and that they need to develop technical skills in order to cope with mobile devices adoption in teaching. Hence, according to (75 %) of them, higher education institutions should encourage the integration of mobile technology in English language teaching while (45 %) stressed the necessity of providing training on how to use mobile devices in English language instruction.

Table. 03: Teachers' perceptions towards the integration of mobile devices in English instruction.

| Statements | Agree | | Neutral | | Disagree | |
|--|--------|------|---------|------|----------|------|
| | N | P | N | P | N | P |
| 1. The integration of mobile technology has a positive impact on English instruction. | 1 2 | 60 % | 4 | 20 % | 4 | 20 % |
| 2. Mobile learning integration facilitates teaching. | 9 | 45 % | 5 | 25 % | 6 | 30 % |
| 3. Teachers should acquire the necessary technical skills in order to cope with technology adoption in teaching. | 1 7 | 85 % | 3 | 15 % | 0 | 00 % |
| 4. Mobile devices usage enhances learners' English communicative competencies. | 1 1 | 55 % | 3 | 15 % | 6 | 30 % |
| 5. M-learning integration in EFL classes motivates learners and raises the learning outcome. | 1 4 | 70 % | 4 | 20 % | 2 | 10 % |
| 6. M-learning has several merits in English instruction. | 1 3 | 65 % | 4 | 20 % | 3 | 15 % |
| 7. Teachers need training on how to use mobile devices in English language teaching. | 9 | 45 % | 3 | 15 % | 8 | 40 % |
| 8. M-learning facilitates teaching and learning process. | 1 2 | 60 % | 2 | 10 % | 6 | 30 % |
| 9. M-learning adoption may include several drawbacks. | 8 | 40 % | 5 | 25 % | 7 | 35 % |
| 10. Higher educational institutions should encourage and support the integration of mobile devices in English teaching and learning. | 1 5 | 75 % | 3 | 15 % | 2 | 10 % |

5. Recommendations and Implications

Based on the findings of this research work, the following recommendations and pedagogical implications can be drawn:

- (1) Educational institutions should provide professional development activities associated with technology to update teachers' skills and knowledge, and provide technical support when needed.
- (2) Support partnerships that help teachers share effective technology practices and experiences.
- (3) Teachers are invited to draw their students' attention to the importance of using mobile devices wisely in learning English as they are portable means of information that is available to almost every one today.
- (4) Teachers are also invited to use these handy devices among students as a means to direct them to find their own way and to take charge of their learning. Thus, enhancing what is called autonomous learning.

Hence, (Mtega et al, 2012) assert that awareness among students and teaching staff should be raised since these tools are believed and perceived by the study' s target population to be efficient in teaching and learning.

In order to address the challenges and barriers faced by both teachers and students while using mobile devices in English teaching and learning, Yildirim (2007) suggested that educational institutions should provide access to technology. Furthermore, they need to employ new policies to involve teachers and students in the decision-making processes regarding ICT in their classrooms.

6. Conclusion

The present study stresses that the use of mobile learning can make a positive and significant difference in the process of English teaching and learning. The current research work results revealed that mobile learning provides the support for learning and training, and that mobile technologies have contributed to the potential to support learners studying a variety of subjects.

Results suggested that higher education institutions should make strategic efforts to build M-learning implementation plans, such as, design guidelines, development phases and articulating norms, considering the current level of students' readiness.

As new mobile devices become increasingly available and integrated with computers and desktop functions, the spread of M-learning possibilities will certainly continue. It is doubtful that English language teaching and learning will let such a potentially transforming opportunity pass by without taking advantage of this opportunity to deliver educational content and enhance learners' educational achievements.

Finally, it is recommended that to repeat such a study by using a larger sample that includes participants from different Algerian universities as well as soliciting the attitudes of teachers regarding this issue, a matter that could yield more reliable and comprehensive results.

References

- Alexander, B. (2006). A New Way of Innovative for Teaching and Learning. *Educause Review*. 41 (2), 32 -44.
- Attewell, J and Webster, T. (2005). Engaging and Supporting Mobile Learners. *M-learning anytime everywhere*. London: LSDA, pp. 15 –19.
- Cress, U and Kimmerle, J. (2008). A systemic and Cognitive View on Collaborative Knowledge Building with Wikis. *Computer-Supported Collaborative Learning*. 105 – 122.
- Bell, J. (1999). *Doing Your Research Project. A guide for first time researchers in education and social science*. Third Edition. Open University Press. Buckingham.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Donmus, V. (2010). The Use of Social Networks in Educational Computer-Game Based Foreign Language Learning. *Procedia Social and Behavioral Sciences*. 9, 1497-1503.
- Douglas, M and Matt, P. (2008). Mobile Learning in Higher Education: An Empirical Assessment of a New Educational Tool. *The Turkish Online Journal of Educational Technology – TOJET*. 7(3), 1303 – 6521.

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- Legris, P., Ingham, J., & Collette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information and Management*, 40(3), 191–204.
- Ligi et. Al. (2017). Mobile Learning in Higher Education. *International Journal of Research*. 5(4), 1 – 6.
- Maryam, T and Marlia, P. (2012). Mobile Learning to Support Teaching English as a Second Language. *Journal of Education and Practice*. 3 (7), 56-62.
- Mohammed, S, et.al. (2016). An Empirical Study of Factors Driving the Adoption of Mobile Learning in Omani Higher Education. *International Review of Research in Open and Distributed Learning*. 17(4), 331 -349.
- Mtega, P. et al. (2012). Using Mobile Phones for Teaching and Learning Purposes in Higher Learning Institutions: The Case of Sokoine University of Agriculture in Tanzania. *Proceedings and report of the 5th Ubuntu Net Alliance annualconference, 2012* (118-129)
- Rodriguez, A, P et al.(2013). The Use of Current Mobile Learning Applications in EFL. *Procedia – Social and Behavioral Sciences* 103(n/a),1189 – 1196.
- Sana, A. (2017). Using Mobile Phones in Learning English: The Case of Jordan. *Journal of Education and Human Development*. 6 (4), 120 -128.
- Yildirim, S. (2007). Current Utilization of ICT in Turkish Basic Education Schools: A Review of Teachers' ICT Use and Barriers to Integration. *International Journal of Instructional Media*. 34(n/a), 171- 186.