

## **The New Innovative Technologies and EFL Classes**

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### **Abstract**

*Information and communication technology can be considered as a powerful tool which provides us with new views on education. Being aware of the benefits of technology in teaching will surely assist teachers, administrators and parents cultivate a positive attitude toward ICT. In this research the questionnaire is used as data collection instrument. The questionnaire addresses only university English language teachers. Forty six university English language teachers are chosen from two universities: Moulay Ismail University Faculty of Arts and Humanities – Meknes and Sidi Mohamed Ben Abdellah Dahr – El Mahraz – Fes as a case study. So as to analyze the data from the questionnaire, the Statistical Package for Social Sciences (SPSS) version 19 is employed. The research findings reveal that Moroccan university English language teachers regard Information and Communication Technology as very essential in their teaching.*

**Key-words:** *Information and Communication Technology, education, attitudes*

## **1. INTRODUCTION**

It is self evident that ICT has been developing very quickly in recent years and opens new directions in the area of education. In other words, the speedy growth in ICT has brought conspicuous and notable changes in the twenty-first century, and influenced the requirements of modern societies. Bransford et al. (2000) confirm that “ what is now known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century” (p. 206).

Dawes (2001) confirms that technologies have the capacity to assist education across the curriculum and supply chances for useful communication between learners and educators in ways that have not been possible before. That is to say, ICT in education has the ability to be effective in bringing about changes in ways of teaching.

The primary objective of this research is to obtain satisfactory understanding of how important do Moroccan university English language teachers think ICT is in their teaching. This study seeks to answer the following research question:

RQ : How essential do Moroccan university English language teachers think ICT is in teaching?

## **2. PREVIOUS STUDIES**

The utilization of ICT in the classroom is very essential for providing chances for learners to function appropriately in an information age. Obviously, with the growth of new technologies, the benefits of computers may have increased step by step as well. The centre of attention however, should not be on the computer as an instrument in education, but as a useful learning tool (Bransford et al., 2000; Romeo, 2006). Bransford et al. (2000) state that “ what is now known about learning provides important guidelines for uses of technology that can help students and teachers develop the competencies needed for the twenty-first century” (p. 206). Another way of expressing this point is that institutions that do not embody the employment of ICT in schools cannot really claim to get their students ready for life in the twenty-first century.

Information and Communication Technology can be defined as new multimedia technologies, including computer software, CD-ROM, the Internet, mobile phone, television, movie as well as Internet-based Project work, e-mail, chat, blogs, wikis, podcasts, and so on (Andrews, 2000b). Lever-Duffy et al. (2005), state that some ‘educators may take a narrower view’ and predominantly ‘confine educational technology (ICTs) primarily to computers, computer peripherals and related software used for teaching and learning’ (p. 4-5).

Actually, ICT can play multiple roles in learning and teaching processes. Various researchers and theorists state that the use of computers can lend a hand to learners to become knowledgeable, decrease the amount of direct instruction given to them, and

provide instructors with a chance to assist those students with particular needs (Iding, Crosby, & Speitel, 2002; Shamatha, Peressini, & Meymaris 2004; Romeo, 2006). Becta (2003) suggests that the success of the integration of ICT into education differs from curriculum to curriculum, place to place, and class to class, depending on the way in which it is applied. Bottino (2003) and Sharma (2003) highlight that the employment of ICT can boost performance, teaching, administration, and enhance pertinent skills in undeveloped societies. Besides, ICT can ameliorate the nature and value of education by assisting learning by doing, real time conversation, directed instruction, problem solving, information seeking and analysis, and critical thinking, as well as the ability to communicate, collaborate and learn (Yuen et al, 2003).

The employment of ICTs in the classroom could foster 'deep' learning and permit teachers to react better to the various requirements of different students (Lau & Sim, 2008). In other words, ICT is a very significant instrument which, when employed suitably, can cultivate the move to a learner centered environment. Harris (2002) carries out case studies in three primary and three secondary schools, which concentrated on innovative pedagogical practices including ICT. Harris deduces that the advantages of ICT will be obtained "...when confident teachers are willing to explore new opportunities for changing their classroom practices by using ICT". The employment of technology will not only intensify learning conditions but also get next generation ready for coming lives and occupations (Wheeler, 2001).

This section embodies what the literature asserts about the value of ICT for instructors and learners, comprising the following issues ICT developing the quality and accessibility of education, ICT developing learning environment, and ICT developing learning motivation.

Interestingly, one of the most essential gifts of ICT in the discipline of education is easy access to learning. ICT enhances the flexibility of delivery of education so that students can approach knowledge anytime and from anywhere. It can affect the way learners are taught and how they learn. Indeed, this would get the learners ready for lifelong learning as well as to ameliorate the value of learning. Individuals are recommended to access knowledge by means of ICT to keep pace with the latest advancements (Plomp, Pelgrum & Law, 2007). ICT can be employed to eliminate communication obstacles such as that of space and time (Lim and Chai, 2004). More precisely, teachers and learners no longer have to depend only on printed books for their educational requirements. With the Internet, a plenty of learning materials can now be accessed from anywhere at anytime of the day. Attwell and Battle (1999) investigate the connection between owning a home computer and school performance, their conclusions propose that learners who have access to a computer at home for educational aims, have advanced scores in reading and math. Becker (2000) discovers that ICT magnifies learner engagement, which guides to an addition amount of time learners to expend working outside class.

A great deal of research has demonstrated the advantages to the value of education (Al-Ansari 2006). Pelgrum (2001) has observed that ICT is “not only the backbone of the Information Age, but also an important catalyst and tool for inducing educational reforms that change our students into productive knowledge workers” (P. 2). ICT is a very powerful instrument for supplying educational chances. It is very hard, if not impossible, to picture future learning conditions that are not assisted, in one way or another, by ICT. According to Bransford et al. (2000), ICTs can be employed to assist pedagogic practices that give valuable learning environments, if they are used in suitable ways. They can operate as ‘scaffolds and tools’ to aid flourish learning and teaching environments (Bransford et al., 2000).

ICT displays a wholly contemporary learning environment for learners, in this way necessitating a distinctive skill set to be successful. Numerous theorists have discussed that new technologies can support students to make use of their contemporary knowledge to build new knowledge and that is an essential factor in an efficacious learning conditions ( Bransford et al. 2000; Romeo, 2006; Jonassen et al. 1999). According to Wozney et al. (2006) teachers who favour learner-centred methods, are more likely to integrate technologies in teaching. To put the idea that has just been stated into distinctive words, since learner-centred environments presume that learners are stimulated to become responsible for their own learning (Bransford et al., 2000; Romeo, 2006), new technologies may provide students with a chance to select the manners of their learning.

ICT is possibly a strong and an effective instrument for presenting educational opportunities. Many teachers employ ICT in their classes to boost their students’ motivation. The utilization of ICT in education has been believed to develop student motivation (Grabe&Grabe, 2007; Kelleher, 2000; Osborne & Collins, 2000; Rodrigues et al., 1999; Skinner &Preece, 2003). Trimmel and Bachman (2004) examined the effect of presenting laptops into classrooms and one of their findings was that: “ information technology has a positive impact on school attendance and learning interest”.

ICTs, particularly computers and Internet technologies, facilitate new manners of teaching and learning rather than merely permit educators and learners to perform what they have executed before in a correct way. Learners employing ICTs for learning aims become involved in the process of learning and as more and more learners employ computers as information sources and cognitive means (Jonassen and Reeves, 1996), the effect of the technology on aiding how learners learn will go on to grow. Parkinson &Hollamby, 2003; Roweliffe, 2003) discover that PowerPoint motivates students, if it is exploited adequately. Obviously, ICT like videos, television and multimedia computer software can be employed to supply real content that will attract and involve the learners in the learning process.

### 3. RESEARCH METHODOLOGY

This part is dedicated to the presentation of the method of the study. In other words, it illustrates the research methodology utilized in this investigation.

The participants are selected from two universities: Moulay Ismail University Faculty of Arts and Humanities – Meknes and Sidi Mohamed Ben AbdellahDhar – El Mahraz – Fes as a case study during 2013 – 2014 academic year in Morocco. 30 university English language teachers at Moulay Ismail University Faculty of Arts and Humanities English department – Meknes and 19 university English language teachers at Sidi Mohamed Ben AbdellahDhar – El Mahraz English department– Fes. The two universities have been chosen because they are more convenient in location in terms of access and delivery of the survey. As can be seen from figure1, there seems to be a relatively big number of teachers males 65,2% while females make up 34,8% of the teachers included in the study.

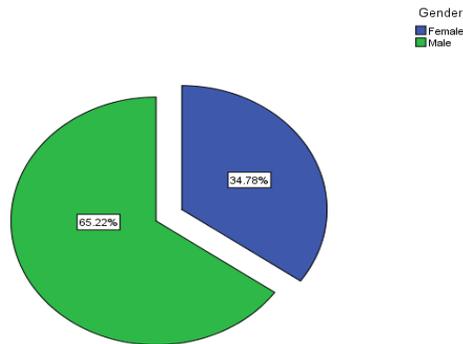


Figure 1. Distribution of Participants by Gender

Furthermore, the participants in this investigation are experienced since the majority 86,9% of this population has more than five years of experience in teaching. The results indicate that only 13,1% of the participant instructors who have five or less than five years of experience. Therefore, it can be emphasized that most of the participants in this examination are quite experienced ( See figure 2).

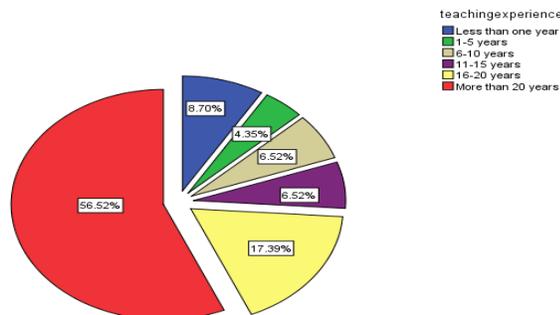


Figure 2. Distribution of Participants by Teaching Experience

The questionnaire is employed as data collection tool so as to gather necessary data. Admittedly, the questionnaire is one of the popular instruments utilized in conducting surveys. Questionnaires are relatively more economical than other approaches in terms of time and money and they can be suitable for respondents as they can complete them in their own time (Sarantakos, 1993).

In this study, a pilot study has been conducted with 5 university English language teachers immediately after the approval and the obtaining of permission from the two universities. These subjects are volunteers from the target population. Piloting has been done for two main reasons: first, to remove any ambiguities the respondents may encounter and second, to test the duration of the questionnaire completion.

One vital type of data analysis was utilized in order to answer the main research question of this research. To analyze the data from the survey questionnaire, the Statistical Package for Social Sciences (SPSS) version 19 was used.

#### **4. FINDINGS AND DISCUSSION**

The research question “How essential do Moroccan university English language teachers think ICT is in teaching?” is evaluated through eleven items in the questionnaire. Indeed, the first five points in the questionnaire illustrate the instructors’ impression concerning the importance of hardware types in teaching. The second five items demonstrate the teachers’ perception regarding the significance of software types in teaching. The last item, the eleventh one, is in the form of an open-ended question in which respondents are invited to add other ICT tools essential in their teaching if any.

**Table .1 Response frequencies for the importance of hardware types in teaching**

Hardware	Not at all		A little		To some extent		Undecided		Very Essential	
	F	%	F	%	F	%	F	%	F	%
<b>1. Computers</b>	<b>1</b>	<b>2.2</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>17.4</b>	<b>0</b>	<b>0</b>	<b>37</b>	<b>80.4</b>
<b>2. CD-ROMs or DVDs</b>	<b>3</b>	<b>6.5</b>	<b>6</b>	<b>13.1</b>	<b>20</b>	<b>43.5</b>	<b>2</b>	<b>4.3</b>	<b>15</b>	<b>32.6</b>
<b>3. Data Projector</b>	<b>3</b>	<b>6.5</b>	<b>4</b>	<b>8.7</b>	<b>13</b>	<b>28.3</b>	<b>1</b>	<b>2.2</b>	<b>25</b>	<b>54.3</b>
<b>4. Interactive Whiteboards</b>	<b>13</b>	<b>28.3</b>	<b>5</b>	<b>10.9</b>	<b>11</b>	<b>23.9</b>	<b>2</b>	<b>4.3</b>	<b>15</b>	<b>32.6</b>
<b>5. Printers</b>	<b>1</b>	<b>2.2</b>	<b>1</b>	<b>2.2</b>	<b>12</b>	<b>26</b>	<b>1</b>	<b>2.2</b>	<b>31</b>	<b>67.4</b>

The first five items in the questionnaire clarify the importance of hardware types in teaching as mentioned before. The results from the table show clearly that the majority of the respondents 97,8% demonstrate that computers are essential in their teaching. Only 2.2 % of teachers consider computers as not essential in their classes. It is also obvious that 89,2% of the respondents think that CD-ROMs or DVDs are essential in their lessons. Whereas, only 6,5% of them who disagree with the statement. 91,3% is the frequency of instructors who regard data projector as crucial in their teaching; however 6,5% of them see data projector as not essential. As the table shows, the frequency of the importance of the interactive whiteboards in teaching 67,4% is considerably lower than the importance of the other hardware types in teaching. It is worth mentioning that the highest frequencies of the importance of hardware types in teaching are observed for computers (97,8% ) and printers (95,6%).

**Table 2 Response frequencies for the importance of software types in teaching**

Software	Not at all		A little		To some extent		Undecided		Very Essential	
	F	%	F	%	F	%	F	%	F	%
<b>6. Word processing</b>	2	4.3	1	2.2	4	8.7	1	2.2	38	82.6
<b>7. Presentation software</b>	6	13.1	0	0	7	15.2	1	2.2	32	69.5
<b>8. Spreadsheets</b>	8	17.4	5	10.9	19	41.3	3	6.5	11	23.9
<b>9. Internet</b>	0	0	1	2.2	11	23.9	1	2.2	33	71.7
<b>10. E-mail</b>	0	0	4	8.7	9	19.6	1	2.2	32	69.5

The second five items in the questionnaire describe the teachers' perception concerning the importance of software types in their teaching. These results indicate that 93,5% of the respondents do actually view word processing as essential in their lessons; however, 4,3% do not consider word processing as essential. 84,7% of the participants think that presentation software is essential in their teaching. 13,1% of the teachers involved in this examination do not believe that presentation software is crucial in their classes. It is also evident from the results presented in the table that 75,8% see spreadsheets as fundamental in their teaching. Whereas, 17,4% of them disagree with the statement. As table 2 indicates, the highest frequencies for the importance of software types in teaching were observed for Internet (97,8 %) and e-mail (97,8%). Obviously, the conclusion that can be drawn from table 1 and table 2 is that hardware and software types are essential in the respondents' teaching.

Findings from the survey data indicate that Moroccan university English language teachers consider hardware types as very essential in their teaching. More precisely, the majority of the participants 80,4% believe that computers are very essential in their

teaching and about 32,6% showed that CD-ROMs or DVDs as very essential in their lessons. Concerning data projector, more than half of the participant teachers 54,3% point out that it is very fundamental in their classes. Besides, 32,6% of the respondents display that interactive whiteboards are very important in teaching. Also, 67,4% of the participants acknowledge that printers are very significant in their classes.

As for the importance of software types in teaching, the findings show that Moroccan university English language teachers see software types as very essential in their teaching. Another way of expressing this point is that a high percentage of the participants 82,6% report that word processing is very essential in teaching. Moreover, most of the respondents 69,5% emphasize that presentation software is very important in their lessons. Furthermore, 23,9% of the participant teachers assert that spreadsheets are very fundamental in teaching and about 71,7% of them view the Internet as very essential in their teaching. Also, the majority of the respondents 69,5% declare that e-mail is very important in their teaching.

The last item in the first section in the questionnaire is in the form of an open-ended question in which the participant teachers are invited to add more ICT tools essential in their teaching if any. Actually, some teachers shed light on the following ICT instruments: Scanners, blogs, Ipads and phones.

Software and hardware types can be regarded as powerful instruments which supply us with new views on education. Indeed, being aware of the benefits of making use of software and hardware types in teaching will assist teachers cultivate a positive attitude toward technology integration. It is safe to say that these findings are vital in the sense that they illustrate clearly the awareness of the participant teachers of the importance of information and communication technology in their teaching. This behavior is consistent with Rogers' (2003) Knowledge, persuasion, decision, implementation and confirmation stages of the innovation-decision process. Admittedly, when educators are informed of the innovation, they become aware of it, start to display interest and acceptance, and finally adopt the innovation. However, it is worth-mentioning that teachers' awareness of the significance of ICT in teaching does not necessarily guarantee a successful and an effective integration of ICT in teaching.

Additionally, the findings of the present study indicate that Moroccan university English language teachers proposed numerous suggestions in order to ameliorate the use of ICT for the enhancement of efficient teaching situations. Admittedly, those suggestions can be divided into three main areas: availability of training, availability of ICT resources and effective school policy.

It is safe to say that effective and appropriate teacher training can assist instructors to employ technology in their classrooms and in preparing their lessons. Admittedly, it is possible to find instructors who have a great desire to use ICT in their lessons but lack of training prevents them from implementing ICT in their classrooms. As discussed in the literature review, Brand (1998) has asserted, "If students are going to be prepared

for a technological society, they must be taught by confident and skilled teachers. This can only be done by adequate training and development of teachers” (p. 13). Teachers’ beliefs about the use of technology might well be an important issue for the successful implementation of ICT in teaching. Therefore, effective training can lend a hand to teachers to become open-minded and change their negative attitudes towards technology. The literature on issues which impact the use of new technology in classrooms has identified the teachers’ openness to change as a key issue (Mumtaz, 2000, Fabry and Higgs, 1997, Snoeyink and Ertmer, 2001, Dawes, 1999).

Effective technology integration relies on the availability of ICT tools such as computers and Internet. Hence, faculties are required to afford at least basic ICT instruments if they wish to implement ICT effectively into the teaching process. Even if only one computer is available in the classroom, with a data projector, the instructor can add a variety to the lesson. Pelgrum (2001) discovered that the most frequently mentioned problem when teachers were asked about obstacles to their use of ICT was the insufficient number of computers available to them. It is worth-mentioning that Fabry and Higgs (1997) observe that numbers of computers alone do not necessarily guarantee satisfactory access, and that it is crucial to locate the exact amount and right types of technology where teachers and students can effectively use them.

It is self-evident that policies which faculties use play a significant role in the integration of information and communication technology. Undoubtedly, for a successful integration of ICT in schools, faculty members should discuss and provide teachers with a solid understanding of the benefits of using technology in education. Also, faculties should collaborate with each other and work hand in hand in order to reach satisfactory results. Indeed, learning is a result of construction, collaboration, reflection and negotiation within a rich context in which learning is situated (Brown et al., 1989). It is worth-mentioning that faculties should provide teachers with sufficient time to plan and create activities that allow for the integration of computer technology within their classrooms. According to Manternach-Wigans (1999) “Teachers are very concerned about the lack of time for technology. They say they need more time to learn computer basics, time to attend technology training sessions, time to figure out how to integrate technology in the classroom, and time in the classroom to use technology” (p.28).

Thus, the hypotheses stipulating that Moroccan university English language teachers perceived suggestions for ways of improving the use of ICT for the enhancement of efficient teaching situations are availability of ICT tools and the number of students should be reduced is confirmed on the basis of the already mentioned results.

## **5. CONCLUSION**

It is obvious that Information and communication technology plays a crucial role in the field of education. Bottino (2003) and Sharma (2003) confirm that the use of ICT can enhance performance, teaching, administration, and develop relevant skills in

undeveloped societies. ICT is an effective tool for providing new educational opportunities. Actually, by integrating technology in education, teachers would get their learners ready for lifelong learning. The main purpose of this study is to obtain satisfactory understanding of how important do Moroccan university English language teachers think ICT is in their teaching. Admittedly, this study is guided by one primary research question:

RQ: How essential do Moroccan university English language teachers think ICT is in teaching?

The conclusion that can be drawn from this investigation is the following:

Moroccan university English language teachers view information and communication technology tools as very essential in their teaching practices. Indeed, instructors are aware of the fact that by using hardware and software types in their classrooms they can add a variety to their lessons. Also, by making use of ICT they can afford the students with more individualized learning experience which has a hand in autonomous learning. In summary, it can be said that the importance of information and communication technology in teaching has been identified, but what is missing is the effective integration of materials into teaching.

Several distinctive implications related to ICT integration in the Moroccan universities English departments can be drawn from this piece of research. These can be summed up as follows:

1. Effective implementation of ICT in Moroccan universities relies on teachers who require sufficient knowledge and skills. Therefore, good training is required and necessary to prepare educators on how to make use of ICT competently. In other words, having several distinctive ICT instruments in the classroom does not necessarily guarantee a successful integration of ICT in teaching practices. In fact, teachers need to have a satisfactory and reasonable understanding of how to make a good use of technology to enhance their students learning.
2. Teachers should bear in mind that the large size of a class must not be an excuse of not integrating information and communication technology in teaching. Certainly, teachers should alter what and how they teach in order to make their teaching just as efficient as in small classes.
3. Provide teachers with the necessary ICT tools, (hardware and software), and good network connection.
4. The classroom design should be appropriate to make a good use of ICT equipments.
5. Teachers' worries and misunderstandings about the implementation of ICT tools into the language teaching material should be minimized.

6. Encourage faculties to develop their ICT integration policies.
7. The government and its education department should provide the encouragement and support that enables teachers to integrate ICT in their lessons.
8. The institution must provide a proper evaluation on integration of ICT tools in teaching.

Indeed, the integration of ICT in teaching can provide more opportunities for instructors to work better. By integrating technology in classrooms, learners will have a great desire to take part in the activities that the teacher carries out in class and ultimately contributes in their own education.

Further research about the integration of ICT in Moroccan universities is important if change is to occur. In view of the findings and discussions derived from this investigation and the implications arising from them, the following recommendations can be made:

1. Training programs in technology integration should be ameliorated in both quantity and quality.
2. There are several distinctive studies that tackle the barriers to ICT in English department. However, there is a little work that deals with barriers which occur in other departments. It is therefore proposed that further research be carried out into the barriers to technology integration in other departments like History, geography, Islamic education to name but a few.
3. Throughout the literature on this issue, nearly all the works which discover lack of equipments as a primary barrier stopping teachers from using ICT in their teaching practices, focus only on lack of computers. Actually, it may be helpful, therefore, to look at the barrier preventing teachers from making use of other ICT tools such as interactive whiteboards, Internet, and e-mail.
4. ICT plans for implementing technology in education should be prepared and performed.
5. ICT resources necessary for a successful integration of technology in teaching are expensive. Much of the literature did not involve costs for implementation. Further research could be beneficial in estimating how much it would cost to provide Moroccan university teachers with necessary equipments.
6. The course load of instructors should be decreased.

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