Moroccan University Teachers' Perceptions and Attitudes Towards the Use of Information and Communication Technology (ICT) in the Teaching Process

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Abstract

Over the last few decades, technology has invaded various fields including education. The use of ICT has become a norm in the teaching and learning context; however, in the Moroccan university in general, and in the Faculty of Arts and Humanities in particular, it is not the case. Teaching through ICT has been noticed to be scarce and to move in a slow cadence. This might be due to teachers' attitudes towards and perceptions of technology or to some constraints related to the institution's administration and infrastructure. To this end, the present study aims, on the one hand, to explore the factors behind the slow advancement of ICT, and on the other hand, to study the extent to which teachers use it in their classes. Teachers from three faculties, namely Meknes, Fes Sais and Beni Mellal, were concerned by this study. It has been found that teachers have a positive attitude towards ICT and that there is no significant effect of gender on their attitudes. The use of the Internet out of class and e-mail are the two technological devices that dominate the teachers' teaching methodology.

Introduction

Over the last three or four decades, technology has known a remarkable advancement which has pervaded various domains such as economy, health, media, and education is no exception. Concerning this latter field, with a special reference to English language teaching, significant changes have been brought to the teaching/ learning landscape in certain contexts [1]. Multimedia, the computer, the Internet, e-learning, and videoconferencing are among the basic technologies that revolutionized this landscape, and that have been positioned under the umbrella of what came to be known as the information and communication technology, henceforth (ICT).

In Morocco, the Ministry of Education has launched several projects, namely NAFIDA, GENIE, INJAZ, and MARWAN with the aim to promote the use of ICT in education. At the secondary school level, many schools have benefited from these projects, and many teachers have undergone some training in this area. However, at the university level, little has been heard about the above projects. Thus, the aim of this paper is twofold: (1) to explore the English university teachers' perceptions of ICT, and (2) to investigate the extent to which teachers at the Faculty of Arts and Humanities use technology as part of their teaching process.

After defining this notion of ICT, we will review some studies dealing with the usage of technology in the educational environment. Then, the methodological framework will be given, and finally, we will provide the results of the study.

Definitions

ICT is defined as a "diverse set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information." [2] These tools, according to this researcher, include in the context of education "desktop, notebook, and handheld computers; digital cameras; the Internet and World Wide Web; CD-ROMS and DVDs; and applications such as word processors, spreadsheets, tutorials, simulations, electronic mail, digital libraries, computer-mediated conferencing, videoconferencing, and virtual reality." (p. 2) Technological devices in the field of education encompass "computers, the Internet, broadcasting technologies (radio and television), and telephony." [3, p. 4]

Along the same lines, ICT is described "as a tool for finding information and communicating with others ... Information can be found both on the web and in CD-ROM databases, and people can communicate with one another by email, in chat rooms, discussing various themes in news groups and by taking part in videoconferences." [4, p. 156] Based on these definitions, and for the purpose of the present study, ICT

can be defined simply as the use of the afore mentioned technological tools for pedagogical purposes, mainly for teaching English as a foreign language.

Background

ICT is not a new comer to the field of education; it dates back to the 1920s and 1950s when radio and television had been used as technologies for teaching different subjects [3]. Since then, ICT usage has been growing dramatically, and has taken different forms. Much has been written on the use of myriad digital tools in classrooms, which gave birth to an era of technology-driven education. Among these tools, television ([5]; [6]), video ([7]; [8]), the computer ([9]; [10]), and the Internet ([11]; [12]) have taken a major part.

Along with this technology revolution in education, research has been carried out on teachers', students' and administrative staff perceptions towards the incorporation of ICT in the overall school curricula. Concerning teachers, the focus of the present study, it is argued that positive attitudes on the part of this pedagogical group towards ICT are necessary in order to ensure both its acceptance, and hence its integration in the teaching-learning environment [13]. In the same vein, it is viewed that ICT will be beneficial "when confident teachers are willing to explore new opportunities for changing their classroom practices by using ICT." [14, p. 458] Three conditions were set if teachers are to introduce ICT into their teaching experience; they suggest that teachers need to "believe in the effectiveness of technology, [they] should believe that the use of technology will not cause any disturbances, and finally [they] should believe that they have control over technology." [15, p. 27]

The incorporation of ICT in the classroom implies and imposes a reconsideration of our educational philosophy as a whole. New approaches, new classroom settings are needed to match this technology-driven education. A lot of institutional investment is required through projects and some training programs that would help teachers improve their ICT competencies. In other words, the integration of technology in the teaching-learning environment calls for a change in the pedagogical roles of teachers, students and administrative staff. The assumption here is that, "the effective integration of ICTs in the education system is a complex, multifaceted process that involves not just technology ... but also curriculum and pedagogy, institutional readiness, teacher competencies, and long-term financing, among others." [3]

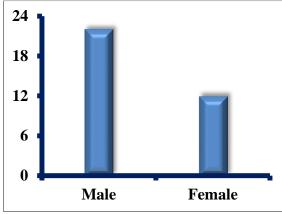
Methodology

A questionnaire has been designed for the purposes of the present study. It consists of three parts: the first one is meant to generate teacher's perceptions of ICT, the second part concerns the extent to which teachers use different technological tools and the last one seeks to explore the difficulties in the usage of ICT.

We have administered the questionnaire to 50 teachers belonging to three faculties of arts and humanities (Beni Mellal, Meknes and Fes Sais). We received only 34, which is representative, given the total number of teachers at the English departments in these faculties.

Results and discussion

The number of participants consists of 22 males and 12 Females, and the teaching experience of teachers varies between 4 and 26 years and has been categorized into three groups: less than 10 (Group1), between 11 and 20 (group2) and more than 20 years (Group3). This is shown in the charts bellow (1 and 2), respectively.



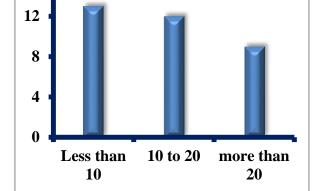


Chart 1: Gender frequency

Chart 2: Teaching experience of respondents.

Teacher's perceptions of ICT

Concerning this first component, the respondents have shown a global positive attitude towards ICT on a Likert scale. Indeed, the majority have opted for either strongly agree or agree with all items, except for the ones related to negative effects of ICT (making learners lazier and reducing their critical thinking), for which most respondents disagree (see charts 3 and 4).

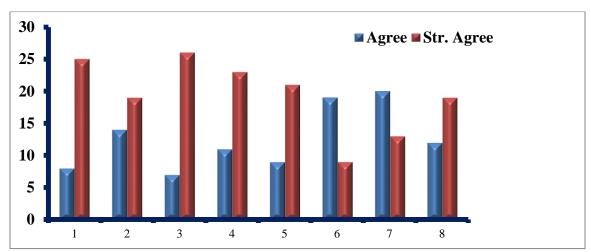


Chart 3: teacher's positive attitudes towards ICT

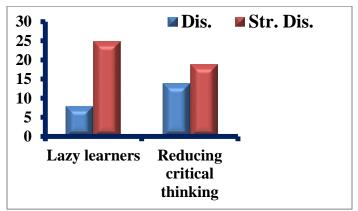


Chart 4: teacher's negative attitudes towards ICT

To test whether gender and teaching experience variables have any effect on the above results, we have submitted the data to the Chi square test (test of independence). The results were not significant which means that there is no relationship between these variables and all the items included in this questionnaire.

Usage of ICT

Based on the findings, the tendency is towards the use of the internet (70%) and the email (82%) out of class context. These percentages imply the dominance of these two technological devices in the teacher's pedagogical work. With less importance and reduced frequency of use, comes the integration of the computer and PowerPoint in the teaching/learning environment. It has been found that the above discussed ICT tools are mainly used with higher levels, namely Master classes and Semester 5 and 6 classes. This is shown in chart 5:

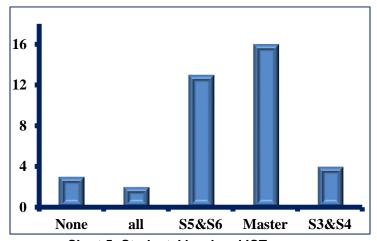


Chart 5: Students' level and ICT usage.

Obstacles in the use of ICT

Teachers ranked poor infrastructure, number of students in a classroom, and administrative hindrances, respectively as the most possible obstacles to the ICT usage. As chart 6 demonstrates, 88% of teachers view that poor infrastructure is the biggest problem, 70% blame the number of students and 48% attribute lack of use to administrative hindrances. Finally, only 37%, 33% and 14% of the teachers consider the difficulties to access existing technological tools, lack of knowledge and time management, respectively as difficulties in the use of ICT.

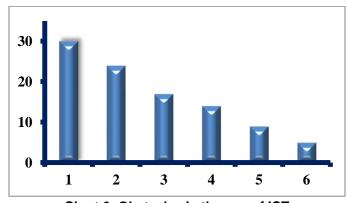


Chart 6: Obstacles in the use of ICT

Conclusion

This study has been an attempt to explore teachers' perceptions of ICT and the extent to which they use technology as part of their overall teaching methodology. Based on the findings, we came to conclude that teachers have highly positive attitudes towards ICT, and that they tend to use the Internet and the e-mail in their teaching process. It has also been found that the use of ICT tools is mostly restricted to higher levels (master, S5 and S6) and it is limited due to poor infrastructure, the large number of students in classes, and administrative hindrances.

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