ORIGINAL ARTICLES

Teachers' perceptions of motivating factors to use ICT in the classroom

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ABSTRACT

In the current decade, there has been a growing interest in using information and communication technology (ICT) in educational settings. Although the teachers try to minimize the discouraging factors preventing them to use ICT in instruction, there are a number of factors that motivate teachers to employ these new technologies in teaching and integrate them into the curriculum. This paper aims to explore the teachers' perceptions of the factors encouraging teachers to integrate ICT into the classroom. Therefore, a survey questionnaire was administered to 30 high school English teachers who were teaching in the high schools of Isfahan, Iran. Stratified random sampling was used to ensure selecting the proportionate number of teachers from all five educational districts in Isfahan. The descriptive analysis of the data revealed that various ways to integrate ICT into the curriculum and the ability to use ICT for sharing information and ideas with others inspire teachers to use ICT in the classroom. Moreover, evidence of the positive impact of ICT on teaching and learning is another important factor motivating teachers to integrate ICT into the curriculum.

Key words: Information and Communications Technology (ICT), Integration, Perceptions, Motivation, English as a Second Language (ESL).

Introduction

Information and communication technologies (ICTs) refer to a wide range of technologies. ICTs are defined as technological tools and resources which are used to communicate, create, disseminate and manage information (Thierer, 2001). These technologies include computers, the Internet, radio, television, social networks and etc. In the last decade, there has been a growing interest in using computers and the internet to improve the effectiveness of teaching and learning in all levels and in both educational and non-educational settings. Although nowadays the older technologies such as radio, television and telephone are given less attention, they have a longer and richer background as educational tools. For example, radio and television have been used for distance education for over four decades. Therefore, the integration of new ICTs such as computers, the Internet and social networks in education is still in its infancy in comparison with the use of older technologies such as radio and television. This is due to the limited infrastructure of ICTs and the high costs of access to internet in developing countries (Carlson and Firpo, 2001).

The study of integrating ICT in teaching and learning is one of the most widely discussed issues in the field of education (Rosen and Weil, 1995; and Thierer, 2000). The majority of researchers and educators believe that ICT, when properly used, improves teaching and learning and provides more teaching and learning supports for the teachers and learners (see Westera and Sloep, 2001; Melor Md Yunus, Lubis and Lin, 2009; Salehi and Salehi, 2011) . Poole (1996) pointed out that computer illiteracy is considered as the new illiteracy. This statement clearly shows the importance of equipping the schools with computer facilities and using ICT in schools. There is no doubt that using ICT in schools improves teachers' instructional process and facilitates students' learning process. Many research studies have shown the positive effects of technology aided instruction (see Burnett, 1994; Fitzgerald and Warner, 1996). Moreover, some ICT related studies have shown that there are a number of factors that motivate teachers to use ICT in teaching. Therefore, this paper aims to explore the high school English teachers' perceptions of the factors encouraging teachers to use ICT in the classroom.

Literature review:

Meadows and Leask (2000) provide several factors why it is important that teachers use ICT as an instructional tool in general, and Krajka (2002) offers reasons for language teaching in particular. There are four main reasons concerning the use of ICT in teaching English as a Second Language (ESL) (Melor, 2007). First,

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the governments force all students to have the necessary ICT skills so that they can direct the economy into the information age. Therefore, more and more school principals expect teachers to be able to conduct lessons using ICT so that teachers need to understand the significance of ICT in education (Meadows and Lsask, 2000). Second, teachers can use ICT for personal or professional reasons. In addition, Internet websites could be very effective in supplementing course books due to authenticity, variety and choice of materials (Meadows and Leask, 2000; Krajka, 2002). Third, many students use computers and the Internet regularly and these are very powerful factors motivating students to learn (Krajka, 2002). Moreover, students and teachers have widely accessible and free ways of communication with students from other countries through email, chat rooms, discussion lists, videoconferencing, etc. Teachers, therefore, should be aware of these facilities, take advantage of them and provide opportunities for all students to make the best use of the technology available in both school and home (Meadows and Leask, 2000; Krajka, 2002). Finally, students may learn better and faster where a variety of technologies are used; ICT could often have positive motivating effect on students; ICT may allow learners to approach materials from their learning style perspective (Meadows and Leask, 2000). In addition, Internet websites could supplement or replace course books effectively due to the authenticity, variety, choice and interactivity of website instruction (Krajka, 2002).

Methodology:

The purpose of this paper is to explore the high school English teachers' perceptions of the factors inspiring teachers to use ICT in the classroom. Therefore, a validated questionnaire was administered to 30 high school English teachers to measure their perceptions of the motivating factors for the teachers to employ ICT in the curriculum. Stratified random sampling was used to select equal number of respondents from all five educational districts in the city of Isfahan, Iran.

The questionnaire was designed in five sections. The first section consisted of five demographic items related gender, age, academic qualifications, years of teaching experience and major grades that were currently being taught. The second section consisted of three multiple-choice items related to the teachers' familiarity with ICT. The third section consisted of 11 items and was designed to elicit teachers' perceptions of the effect of high-stakes tests on using ICT in the classroom. The fourth section, including eight items, dealt with the factors that encourage teachers to use ICT in the classroom. And the last section of the questionnaire consisted of eight items dealing with the factors that discourage teachers to use ICT in the classroom. All the items in the last three sections were designed on a five-point Likert scale of agreement, where one = strongly disagree, two = disagree, three = undecided, four = agree and five = strongly agree. The five-point Likert scale was employed as it is one of the most commonly accepted Likert scales in the education field (Cohen, 1976; Cheng, 2004, Green, 2007; Melor Md Yunus, Salehi & Kashefian-Naeeini, 2011). Although the questionnaire consisted of five sections, the results obtained from sections one and four are reported to achieve the aim of this paper.

Results and findings:

The results are presented in two separate parts. First, the analysis of the data obtained from the first section of the questionnaire is presented. In the second part, the results are categorized according to the factors encouraging teachers to use ICT in the classroom.

Demographic data:

It can be seen in Table 1 that 60 percent of the surveyed teachers were male and 40 percent were female. More than two thirds of the teachers (70 %) aged 20 to 40 and less than one third (30 %) aged over 40 indicating that the majority of the English teachers were young or middle-aged. More than half of the respondents (60 %) had Bachelor's degree and 30 percent of them had Master's degree. Three teachers were PhD candidates who were pursuing their postgraduate studies. The majority of the teachers (70 %) had one to nine years of teaching experience, and 30 percent of them had more than 10 years of teaching experience. Exactly one third of the respondents were teaching in pre-university centers as the major grade that they were teaching and the remaining two thirds were teaching in grades one to three.

Factors encouraging teachers to use ICT:

This section aimed to investigate the teachers' perceptions of the factors that encourage them to use ICT in the classroom. Table 2 and Figure 1 show the most encouraging factors according to the mean scores. Table 3 also shows the frequencies and percentages for each factor. As it can be seen in Table 2, all the items got the mean scores above 3.85, indicating the teachers' positive perceptions of the list of eight factors encouraging teachers to use ICT in the classroom. Teachers believed that various ways to integrate ICT into the curriculum,

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evidence of the positive impact of ICT on teaching and learning, and ability to use ICT for sharing information and ideas with others are the most important factors motivating them to integrate ICT into the curriculum. In addition, as Table 3 shows, the majority of the respondents stated that using ICT improves their teaching skills and even positive educational views about ICT urge them to employ educational technologies inside the classroom.

Table 1: Demographic characteristics of the teachers.

Items	Variables	Frequency	Percent (%)
Gender	Male	18	60.0
	Female	12	40.0
Age	20-30	7	23.3
	31-40	14	46.6
	41-50	6	20.0
	Above 50	3	10.0
Academic qualifications	Bachelor's degree	18	60.0
	Master's degree	9	30.0
	PhD Candidates	3	10.0
Years of teaching	1-3	3	10.0
	4-6	7	23.3
	7-9	11	36.6
	10 and above 10	9	30.0
Major grades of teaching	Grade One	6	20.0
	Grade Two	5	16.6
	Grade Three	9	30.0
	Pre-university level	10	33.3

Table 2: Factors encouraging teachers to use ICT.

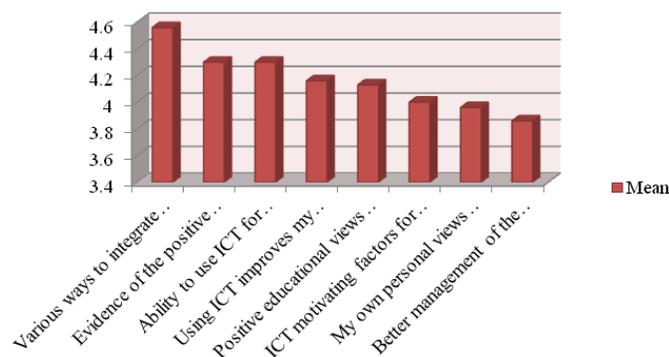| Statements	Mean
Various ways to integrate ICT into the curriculum inspire me to use ICT.	4.56
Evidence of the positive impact of ICT on teaching and learning encourages me to use ICT in class.	4.30
Ability to use ICT for sharing information and ideas with others inspire me to use ICT.	4.30
Using ICT improves my teaching skills so that it inspires me to use ICT.	4.16
Positive educational views about ICT urge me to use ICT.	4.13
ICT motivating factors for the students encourage me to use ICT.	4.00
My own personal views about ICT urge me to use ICT in the classroom.	3.96
Better management of the classes with ICT encourages me to use ICT.	3.86

Fig. 1: Factors encouraging teachers to use ICT according to the mean scores.

Conclusion:

There is no doubt that by integrating ICT into the curriculum, a fundamental shift will be made in the way teachers teach and the way students learn. This study aimed at investigating the teachers' perceptions of the factors encouraging teachers to integrate ICT into the classroom. The findings of the paper showed that various ways to integrate ICT into the curriculum and the ability to use ICT for sharing information and ideas with others motivate high school teachers to use ICT in the classroom. The evidence of the positive impact of ICT on teaching and learning was another important factor inspiring teachers to integrate ICT into the curriculum. Moreover, the majority of the surveyed teachers believed that using ICT improves their teaching skills and even positive educational views about ICT encourage them to use new information and communication technologies inside the educational settings. However, to integrate ICT into teaching and learning in each educational setting, there must be adequate funding and financing of education.

Table 3: Factors encouraging teachers to use ICT.

Statements	Strongly disagree and disagree		Undecided		Agree and strongly agree	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Evidence of the positive impact of ICT on teaching and learning encourages me to use ICT in class.	1	3.3	2	6.6	27	90.0
Various ways to integrate ICT into the curriculum inspire me to use ICT.	0	0.0	2	6.6	28	93.3
Positive educational views about ICT urge me to use ICT.	1	3.3	5	16.6	24	80.0
My own personal views about ICT urge me to use ICT in the classroom.	2	6.6	6	20.0	22	73.3
ICT motivating factors for the students encourage me to use ICT.	2	6.6	5	16.6	23	76.6
Ability to use ICT for sharing information and ideas with others inspire me to use ICT.	1	3.3	1	3.3	28	93.3
Using ICT improves my teaching skills so that it inspires me to use ICT.	0	0.0	4	13.3	26	86.6
Better management of the classes with ICT encourages me to use ICT.	2	6.6	7	23.3	21	70.0

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