Patterns of ICT Use at Home/ School and Factors Supporting/ Hindering its Use: The Case of Iranian EFL Teachers

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Abstract. The current study aimed at exploring the patterns/frequency of ICT use by Iranian EFL teachers and the factors affecting ICT integration at school/ home. A sample of 120 English teachers from high schools and pre-university institutes in Kermanshah was approached for the purpose of conducting this research which was in two phases including distributing the questionnaire and the interview phase of the study. Out of 120 questionnaires which included items on demographic information, ICT use at home and ICT use at school, 56 were returned that was appropriate for the purpose of this study. Six teachers were also interviewed to find out about the factors affecting ICT use at school/home. The results revealed a limited use of most ICT applications among English teachers at school though almost all applications were reported as being used by them at home. This restricted use as the data from the interviews indicated was due to the problems that teachers faced as a result of the many factors that affected their ICT integration which are explored deeper in this paper.

Keywords: ICT, Iranian EFL teachers, patterns, home/ school ICT use

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1. INTRODUCTION

Technology is arguably part of our modern life in today's world and one cannot think of many aspects of our lives that do not rely on technology. Not too long ago, computers were merely used for analysis of large set of data by specialists. Nowadays, however, people from university professors to school kids have access to computers and should somehow be conversant with them (Cooper, 2006).

The use of computers in education is also steadily increasing with the governments emphasizing integration of technology in classrooms more and more. The Iranian government is not an exception to this and has made some attempts to introduce technology in education hoping for greater improvement in the quality of teaching and learning. However, studies such as Zamani's (2010) and Shahamat and Riazi's (2009) have shown that in spite of the well-known benefits of ICT use in teaching and the efforts made by the Iranian government to integrate ICT in education, the process of integration by teachers is very slow and demands more attention on the part of both teachers and the ministry of education.

Furthermore, the problem investigated in this study originates from an earlier study by Shahamat and Riazi (2009) with the purpose of finding out about the use of educational technology by English teachers in Iranian senior secondary schools as compared to private language institutes. Results of this study revealed that the uptake of ICT in teaching language is much lower than that of private institutes and most means of technology are rarely or almost never used/ heard of. Shahamat and Riazi's study was conducted using questionnaire as the means of data collection and the students were the respondents rather than the teachers themselves and they were expected to choose the responses from a five point Likert scale showing the extent to which educational technology was employed in their English classes. As the researchers point out one of the limitations of this study was not taking into consideration

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the age, sex and literacy level of the students as the respondents and teachers as the ultimate users of technology which are what are accounted for in the present study.

Zamani's study, though beneficial in many respects, including comparing the extent of ICT use by Iranian teachers and students in one decade, has failed to address the patterns of ICT use of teachers, including EFL teachers. Shahamat and Riazi's study, though it compensates for overlooking language teachers' ICT use, underplays the crucial role of these teachers and relied on collecting data through the students respondents rather the teachers to find out about the extent to which some ICT materials are used in schools. Moreover, they failed to dig deeper into the reasons behind the emerging patterns and relied on the results of the questionnaire as the only data collection tool used in their study.

The present study looked at the uptake of ICT by EFL teachers and the frequency of use from the point of view of the teachers themselves. In addition, this study aimed at examining difference among teachers' ICT use at home and school. Gender as one of teachers' personal characteristics was also accounted for to find out its relationship with physical access to computers at home/ school. It further went on and revealed the reasons behind the emerging patterns of ICT use from the point of view of teachers by this particular group of respondents in an interview. In fact, increased awareness of the current state would be helpful in understanding the status of technology in teaching languages in Iranian secondary schools, finding ways to help teachers and get the education departments address the needs of the teachers and students regarding adoption of the technology.

2. REVIEW OF THE RELATED LITERATURE

2.1 ICT in Education

Proliferation of information and communication technology (ICT) in education over the past two decades has been part of the governments' plans to revolutionize the educational system, prepare students for the digital era and also speed up the national development efforts. These promises have generated the requirement of embedding/integrating new digital tools in education (Pelgrum, 2001 in Albirini, 2006).

ICT has acquired a place in education in recent years in addition to other sectors of the society. Many applications have found their place in school subjects (e.g. programmes for drills). Moreover, a number of general programmes such as word processing, data base are being used as working, teaching, learning tools. More recently, email and Internet have found their way to schools and it seems ICT applications are replacing previous learning tools in a way that change the role of teachers from a mere transmitter of information to supporter and guide of students' learning process (Heemskerk, 2005).

To count some of the advantages of using ICT, it should be mentioned that through using technology, teachers and students will have an array of tools available for acquiring knowledge, critical thinking and communicating with other colleagues and classmates and therefore more chance of being successful learners. Studies have shown that access to technology encourages more collaboration rather than isolation of learners as compared to traditional classrooms. It also engages learners more as they gain more knowledge and necessary skills to generate ideas and produce results. Over time they also develop positive attitudes toward themselves and their abilities. The classes in which technology is implemented can also accommodate different learning styles and encourage learner- centeredness in comparison to traditional classrooms in which teachers play the role of lecturers and source of knowledge (Fisher et al, 1996) provided

that they are in good hands and are used according to the appropriate learning and teaching theories.

2.2 ICT in Iran

Governments of all countries all over the world including developing countries have made attempts to introduce ICT in education in the hope of attaining the goal of a more effective and improved quality teaching/learning. The Iranian government is not an exception to this undertaking. In fact, the implementation of computers in Iranian society started in 1988 with a fast growth that resulted in diffusion of this innovation in Iranian senior secondary schools, though this latter is a relatively new phenomenon in Iranian context (Zamani, 2010). This computer diffusion began gradually starting as a pilot project in the big cities and for the purpose of teaching Mathematics major students in senior secondary school some IT skills. The long- term intention was to implement IT courses for students of all majors. It is worth mentioning that since 1993 computers have been used in Iranian schools for administrative purposes (Zamani, 2010).

As a part of the government's plans to integrate ICT into education, all senior secondary schools were equipped with computer rooms and in some cases internet connections. Teachers of all subjects have also been required to take part in in-service trainings to prepare for integration of the new innovation in education. In-service training opportunities for many teachers in different subject areas have been provided with the hope that teachers' use of technology in education would improve the quality of teaching and learning, and increase their technological skills. Pertinent to this objective, annual national competitions on preparing ICT-based teaching material are held to encourage integration of ICT in education among teachers.

2.3 Previous Research

Previous research on ICT integration in education has shown, factors such as level of training, the amount of ICT resources, availability of a supportive network in school, computer phobia, are among the variables that affect the uptake of ICT in schools. Other factors contributing to ICT use in teaching are ability to use ICT, the difficulties teachers might have encountered in using it, the extent of the resources availability and their satisfaction with IT, and whether using it in teaching is enjoyable and interesting, class time, low level of teachers' access to school computers and lack of computer competence, , loyalty and perceived culture of organization, perceived usefulness and perceived ease of use, school or district expectation of level of ICT use, teachers' personal expectation of technology use (Jedeskog, 1988, Ferndaha 2002 in Ma et al, 2005; Cox et al, 1991; Selwyn 1997 in Cox et al, 1999; Albirini, 2006; Hammond et al 2009; Abas 1995; Al-Oteawi 2002 in Albirini, 2006; Legris et al 2003 in Ma et al, 2005; Bullock, 2004).

Findings of a longitudinal study by Zamani (2010) revealed that in spite of increasing number of computers in schools since 1995-2005, a limited number of teachers, mainly IT teachers, use them for educational purposes. The reasons for this low rate of computer usage were identified as fear of breaking them and the subsequent cost of repairing, lack of relevant software, inadequate IT knowledge and competence of teachers, and limited support from the head-teachers. Zamani also reported the "language ability "of teachers as another important factor that hinders teachers from using computers in their teaching though she does not specify the subjects taught by those teachers or their major.

Considering the fact that teachers are the most important factors affecting the quality of education, vast investment should be done to provide them with practical knowledge necessary to play their part in enhancing the quality of education (Farhady et al 2010) rather than ignoring them and focusing on the learners and their needs in spite of their being interconnected.

Patterns of ICT Use at Home/ School and Factors Supporting/ Hindering its Use: The Case of Iranian EFL Teachers

The results of studies by Zamani (2010) and Shahamat and Riazi (2009) point out that the uptake of ICT in teaching language in Iran is much lower than that of private institutes and most means of technology are rarely or almost never used/ heard of and that a limited number of teachers, mostly IT teachers, use them for educational purposes. Findings of a longitudinal study by Zamani (2010) revealed that in spite of increasing number of computers in schools since 1995-2005, a limited number of teachers, mainly IT teachers, use them for educational purposes. The reasons for this low rate of computer usage were identified as fear of breaking them and the subsequent cost of repairing, lack of relevant software, inadequate IT knowledge and competence of teachers, and limited support from the head-teachers. Zamani also reported the "language ability "of teachers as another important factor that hinders teachers from using computers in their teaching though she does not specify the subjects taught by those teachers or their major.

To find out more about the ICT related issues, this study addressed the following questions:

1. How frequently do Iranian EFL teachers use particular tools of ICT at home?

2. How frequently do Iranian EFL teachers use particular tools of ICT at school?

3. What are the factors that support/ hinder Iranian EFL teachers in using ICT in school?

4. What is the impact of gender on Iranian EFL teachers' access to technology at home/school?

3. METHODOLOGY

This study is a descriptive study of exploratory nature aimed at finding out about patterns of ICT use by Iranian EFL teachers at senior secondary school level and the factors affecting their ICT use.

3.1 Research site

This study was conducted in the senior secondary schools and pre-university institutes in Kermanshah in the western part of Iran. As mentioned before the reason behind selecting these schools rather than primary and junior secondary school was their access to computer rooms which are not present in other levels.

3.2. Participants

The participants in this study were 120 male/ female Iranian EFL teachers of three different districts of Kermanshah where the researcher used to be an English teacher for years.

3.3 Data Collection

In the first phase of the study a questionnaire was used to collect data on some variables including participants' personal characteristics and their ICT use at home and school where they used to teach. The second phase of this study was carried out through using semi- structured interview.

4. RESULTS AND DISCUSSION: QUESTIONNAIRE

4.1 Data Analysis

To analyze the quantitative part of the questionnaire, some data-processing facilities such as computers and software packages such as SPSS and word were used.

4.2 The respondents

The respondents were male and female Iranian EFL teachers teaching at the senior secondary schools in Kermanshah. Of 56 respondents 83.3 % (40) were female as compared to 16.7% (8) male teachers. There were 8 missing data regarding the gender.

The largest number of the respondents were aged between 36- 40 (34.7%) and were mostly from district 3 as this educational district covers vaster area of the city thus accommodating for more schools and therefore more teachers.

The large majority of the respondents (36%) had between 11- 15 years experience of teaching and they mainly hold BA in TEFL that is 80%. About 73.3% of the teachers had IT training out of which 52. 8% had more than 30 hours training in IT through in- service courses.

Overall 94.6 % had access to computer at home as compared to 88.7 % at school out of which 87.5 % and 68 % were connected to the Internet respectively. This was close to Ravitz et al's finding (1999 in Hung, 2007) that more than 80% of all teachers were using computers at home or school in America in 1999 but far from the figure reported by the US Department of Education in 2005 (in Jenkins et al 2009) which announced 99% access to Internet at schools. It is worth mentioning that according to the US report within those individual schools 87% of individual classes had access while this figure is 0% for the individual classes in this study.

4.3 Male versus female access to computer/Internet

Of the entire 40 female respondents 37(92.5%) had access to computer and 35 (87.5%) were connected to the Internet at home as opposed to all 8 (100%) male respondents with computer and 7(87.5%) with Internet access which is in line with findings of some studies such as Losh (2004) indicating that the gendered digital divide is diminishing. This is, however, in contrast with Cooper's (2006) viewpoint that refers to the existence of such type of divide in terms of computer ownership. Other studies which underrepresent women in their computer use and ownership are Yelland & lioyd, 2001; Wilson et al, 2003; Pinkard, 2005 (in Cooper, 2006).

Considering computer/Internet access at school 33 out of 40 (82%) female teachers (girl schools) had access to computer out of which 23 were connected to the Internet (57%). This ratio was 6 out of 8 computer (75%) and 6 (75%) cases of Internet access for men. The difference turned out to be significant in terms of Internet connection at boy/girl schools as chi-square (.02) was less than .05.

The reason for this difference can be attributed to the male head teachers' (boy schools) willingness to take the risk of accepting the responsibility of any problem associated with Internet use at school (such as students facing inappropriate sites and pictures) and also spending the budget on connecting to Internet.

4.4 Pattern of ICT use by Iranian EFL teachers

4.4.1 Patterns of ICT use at home

Of the 26 activities included in the questionnaire in home use section, writing on computers emerged as the activity used by most teachers (with over 85% use out of which 9% was daily use and 25% weekly and the rest monthly, yearly or never use) followed by watching DVDs (82%), watching photos/films, using educational CDs and searching the Internet for information (80% each), making/using tables or charts and organizing computer files/folders (75% each). It should be noted that the figures are accurate to one decimal place.

Using the Internet for watching TV was the activity used least (18%) followed by tweeting (26%), Internet shopping (28.5%), booking hotels (30%), using face book (33%), booking online tickets (34%) and keeping a blog (36%).

The findings of this part of the study led the researcher to conclude that as the main applications used are those that do not require Internet connection, Internet speed and bandwidth is the main reason preventing most teachers to use it at home and as explained later in school. This is supported by the interview reports in factors affecting ICT use in the next section.

4.4.2 Patterns of ICT use at school

It is important to note that number of the activities included in the school section of the questionnaire were less than those in the home section as they were considered as not relevant to teaching and school use. Examples of such activities are booking hotels/tickets, and shopping. Therefore, of the 21 activities in the school section the following patterns emerged.

Using educational CDs was the activity mostly used (64.5 % out of which only 5% was daily use and about 13% weekly). This was in contrast with the findings of Hung et al' s study (2007) in a developed country probably with high quality Internet connection that showed 80% of teachers in their study asked their students to search the Internet for information. In their study searching the Internet was the main activity used in the classroom. Word processing was the application used substantially more often than the other types of applications listed in Smeet's study (2005) rather than educational CD. Using educational CD was followed by searching the Internet for information (45%), Writing on computer, making tables/charts and playing DVDs (44% each) and installing software (41%).

The activities used less at school were getting the students to use facebook (7%), getting students exchange emails or tweet (11%), getting students chat with others (12.5%), getting students keep blogs (17%) and getting students read others' blog (21%).

4.4.3 Internet versus computer use at home/school

In both home and school the first five applications used largely by the respondents were mainly from the computer uses along with some of the Internet uses. These included writing on computer as the first priority at home (85%) as expected compared to the most used application at school that was using educational CDs (64.5%) which was also referred to in the interview data. Other highly used computer activities were making tables/charts, watching photos, and organizing computer files/folders.

Regarding the Internet use, searching information and installing software were among the first three priorities in schools while only searching for information came among the first five at home.

4.5 Factors affecting integration of ICT in the classroom

4.5.1 ClassTime

All interviewees mentioned time as the main barrier to ICT use at school. They referred to the limited number of class hours allocated to teaching English as a factor stopping them from taking their students to computer room and using ICT for the purpose of teaching. This is in line with the findings of studies by Albirini (2006), Hammond (2006), Eifler et al (2001 in Kay, 2007) which all found class time to be the main barrier to ICT use.

Mona, 36 who uses computer and internet quite frequently for purposes such as typing, finding information, chatting to others,...expresses this time pressure as:

"You know we've got just 3 hours a week for year one , two hours for year 2 and 3...actually... in reality each so- called 2 hours is just 80 minutes in practice not more".

4.5.2 Workload

The need for working two shifts to be able to put the bread on the family table was mentioned as a factor limiting teachers' time thus discouraging them from learning about computers and using it in their classes or even at home. This was seen among the men rather the women as in Iran men are responsible for the costs of living and teachers are among the low-paid groups that puts the pressure on men and makes them overwork. Work overload as one of the barriers to ICT use is consistent with the findings of the study by Hammond (2002) in which the main source of dissatisfaction of all members of the group that is teachers who were the subjects of the study was work overload as a result of the demands of students' coursework. As noted here, the work overload in the present study is because of double shifts which make it somehow different from Hammond's study where students' course work creates overwork for teachers.

One of the male respondent's comments regarding ICT use at home/school was as follows:

"Nearly all the teachers in Iran have to work all day long to make a living...Accordingly, teachers don't have enough time to have a rest, let alone use Internet to keep up to date with the latest news around the world"

A female very low user explains her reason for not using ICT at home/school as:

"...the overloaded school programmes and housework routine doesn't let us use computers at home/school".

This finding implies that the teachers are quite willing to integrate ICT in their classes, however, the contextual factors and also some individual reasons prevent them from doing so regarding the contextual factors.

4.5.3 Training

a) Teacher training

Not having the opportunity to participate in the in- service trainings or the low quality of the courses were mentioned as training barriers to ICT use. Cox (1999), Selwyn (1997), Hammond (2006) are among the studies referring to training as another barrier to ICT use.

Mehri, 34 who has some training but still does not feel confident about using computers said:

"Actually there was one in service course that I was aware of... it was just theoretical, plenty of things to read and nothing practical...later on there were practical courses which I couldn't attend because of my child's birth... others who took the course said they hadn't learned much".

One reason for the inefficiency of the in-service trainings was mentioned to be lack of intrinsic motivation of teachers to take part in the training courses. One interviewee pointed out that teachers mostly attend the course for the score that they receive because of attending it. They do not care if they learn anything or not. This is in contrast with the finding regarding work load and teachers' willingness to integrate ICT in their classes. It seems that work load is just an excuse for those running away from new technology and innovation because of some other reasons such as resistance or fear of technology rather than work load.

One of the interviewees referred to the training as sufficient and useful as she believed it covered everything, though she was self-trained herself. She had heard about the courses from other colleagues.

b) Student Training

Regarding training, students' lack of IT skills was reported as another factor hindering teachers from ICT use which as far as I am concerned none of the studies reviewed for the purpose of this study has referred to. The reason for this could be the fact that in most countries students start working and learning about computers at early years of school thus by the time they reach the secondary schools none of these problems regarding training ad IT skills exist. Leila, who is 27 and holds BA in English literature, was initially employed as an English teacher in one the towns near Kermanshah but when she was transferred to the capital (Kermanshah) she couldn't get a teaching position and became responsible for the IT room in one of the schools. Considering student training she said:

"Students' IT skills vary depending on their home access and private classes... Some majors have a subject called Basic Computer Skills so they work more on computers and are better but mostly are not"

Tina who teaches in non-profit schools referred to students' IT skills as enough and satisfactory explaining that nowadays they have access to computer at home and attend private computer classes.

Mehri who teaches in a vocational school had a different opinion as she believed students of only some majors in her school were trained and had good IT skills and had to do some of their projects on computers. But other majors were not trained.

4.5.4 Language

Most interviewees referred to their competence in English as a factor encouraging and helping them to use computer at home or school. Leila puts it in this way

"My qualification in English has helped me overcome many language problems relating to reading the instructions while downloading, installing... I know lots of IT advisors who are teachers of other subjects are not good at these things because of language problem".

This finding pinpoints the paramount importance of English in facilitating the integration of computers in teaching thus emphasizing the need for some language classes for teachers of other subjects and also counting on English teachers as the pioneers in the process of integration of technology.

4.5.5 Human resources

a) Head teacher support

Almost all interviewees reported the head teacher's lack of support as another important factor discouraging them from ICT use. Studies by Cox (1999), Selwyn (1997), Hammond (2006) , Barton et al (2006) and Eifler et al, 2001; Wepner, et al, 2003 (in Kay, 2007) all indicated that support from the school staff had a significant impact on ICT integration by the teachers . Mukama and Andersson (2008 in Mukama, 2009) also state that access to ICT is also influenced by the style of leadership in each school as some head teachers limit the access to the computer rooms.

The interviewees mentioned that head teachers not only do not encourage them to use the IT room but also lock the room and in some cases when teachers ask for the key or educational CDs they are reluctant to give them the key/CD and let them in. Mehri said once for the first time she decided to take her students to the computer room and show them an educational CD that she had heard had been provided by the education department for English teachers to use:

"I asked the head teacher for it, after a long search... at last she said she didn't know where it was".

The main reason for this lack of support from the part of head teacher according to my personal experience and finding s from Zamani's (2009) study is the fear of breaking down the computers and the consequence of paying for the repair expenses as the head teacher should pay this from the annual school budget which is not enough for running the school.

b) Technical support

Not having an IT technician or an expert to support them while facing a technical problem was also a problem as some schools do not have a technical support or even if they have he/she is not an expert in computers and usually is a teacher of other subjects who has been announced extra in his/her. Leila, one of the interviewees who now works as an IT advisor, is an example of such positioning. This finding matches the findings of studies by Jedeskog, 1988, Ferndaha2002 (in Ma et al, 2005) and Bullock (2004) in which lack of technical support and teachers' fear of facing technical problems were reported as factors discouraging teachers from ICT use.

4.5.6 Physical resources

a) Hardware

The number of computers in each school was mentioned as between 15-20 in public schools as compared to 30 in non-profit schools which some reported as enough if the students were supposed to share the computers in public schools, therefore having 2-3 students behind each screen or each sat behind one in non-profit schools.

Some were saying that they needed to book the room in advance as there is just one room in each school and if their teaching time clashes with someone else's class who is willing to use the computer room, then just one teacher would be able to take their students to the IT room. Booking the room in advance and planning the things in advance was mentioned as a problem that teachers were facing in their effort to integrate ICT in their teaching (Barton et al, 2006).

Mona expresses her dissatisfaction with the facilities they have at school by saying:

"... I mean the computers are not well- equipped there is no speakers for example. I remember once I wanted to play something for my students to listen to but there was no voice coming out of computers because of speaker problems"

I think hardware problems still exist and even if all other barriers are eradicated, lack of new and up to date computers and accessories and also not having enough computer rooms hinders teachers from employing ICT in their teaching.

b) Computer Networking

Some mentioned that computers were not networked and if they wanted to show students a film or listen to educational CDs they couldn't because there was always something wrong with the computers e. g problems with networking. This is also something that can be alleviated if

the school has a technician who is expert in computers not in other subjects as mentioned by some of the interviewees in the previous parts.

Mehri mentioned that some of the keyboards are in Farsi that makes it hard for them to type in English as they can't remember the right place of each English letter.

c) Software

Most of the interviewees were complaining about not having enough software or CDs/DVDs to use in their classes which are consistent with the findings of studies by Hammond (2006) and Bullock (2004). Mehri gave an example in this respect saying that once influenced by somebody's talk in an in-service training she decided to take her students to computer room and play an educational CD that she had heard the educational department had sent to all schools. She said:

"I asked the head teacher for it. She said she didn't know where she had put it, after a long search at last she came empty handed saying she didn't know where it was."

d) Internet connection

Five out of six interviewees had access to Internet at school/home. However, their major concern was the head teachers' unwillingness to pay for high speed Internet due to low annual school budget. Some were saying they do this deliberately as they do not want teachers and student s to use the computer room/ Internet at school because of fear of breaking down the computers and the need to pay for fixing them.

Leila expresses this problem as:

"Head teachers are afraid of letting students and teachers use the IT room, breaking them and then the cost of fixing them as the head teachers should pay from their annual budget which is not enough for running the school"

One of the respondents to the questionnaire explains his reason for not using Internet at home/school as:

"Because I have no access to ADSL (high speed Internet connection) it's frustrating to use the dial-up Internet system."

e) Access to some websites

All the interviewees mentioned the unavailability of some websites in Iran. Interestingly, most of them considered this as a factor reassuring them about the suitability of the available sites lowering their concern about the Internet use at school. They expressed the need for some control at school on students while using Internet if there is any use, of course. Ali is a face book user himself despite its being blocked. Ali's answer to my question about the unavailability of some websites was:

"Some sites are blocked and actually this is fine but there are some websites that can be used in both positive and negative ways... it all depends on the user and unavailability of those sites make things difficult for good users. We often use proxy software but sometimes it is caught and blocked itself and we have to wait for a new one to be found"

Tina 34 who has spent about five years in Australia and as she says she used to be a constant user of face book to keep in touch with her friends expresses her satisfaction with the blockage of some websites such as Twitter, Facebook and You tube and says:

"In this way the chances that students face inappropriate sites is less. After all it's true that some web materials are against our culture and values but it doesn't mean that we shouldn't use Internet. We should be aware of these things and raise awareness of them in our students by telling them that they should avoid them".

4.5.7 Resistance to change

Some interviewees mentioned teachers' resistance to change or sticking to old methods of teaching as another barrier to integration of ICT in schools which is in correspondence with the results of studies by (Sim & Priestley, 2005; Andersson, 2006 in Mukama, 2009) in which it was indicated that some teachers especially old ones are resistant to change and have difficulty in changing their school routine. Leila, the IT advisor, who is self-trained, defined this fear as fear of technology by saying that:

"Teachers are scared of technology. They do not find their training enough to use computers. Maybe more computer training makes them overcome this fear to some extent"

Ali refers to teachers' inflexibility in changing their old methods of teaching either because of their workload and not having enough time to read and keep themselves up to date or because of their low confidence in their ability to adapt to a new method.

Tina puts this resistance in this way:

"The thing is that in our culture using computer for autonomous learning is not appreciated. On one hand people think the only way to learn is to go to formal classes and have a teacher, on the other hand they don't take computer seriously, especially, students who think it is just for playing games."

4.5.8 Role model

Having a role model who uses ICT in her/his teaching or gives talk about the benefits of it was mentioned as a factor that would encourage teachers to integrate ICT in their teaching. This is in line with finding of studies by Bullock (2004) and Barton et al (2006). Considering role models, if no one is able to show the teachers how to collect resources and how to exploit them in their classes, then the novice teachers will experience pressure and burden (Barton et al, 2006). The idea of role model was a key issue emerged in the discussions with the participants in Barton's study.

Mehri gave an example of how she was influenced by somebody who gave a talk in an in-service training session by saying:

"I remember once we had an in-service meeting where somebody had come... I think he was a physics teacher and he was talking about the benefits of using computers in teaching and giving some examples of how his students had improved since he had started using ICT in his teaching."Mehri further went on and said:" I was so impressed that I decided to take my students to the IT room and at least show them some DVD or educational CD the next day..."

Feeling the need to catch up with others or keep up to date was mentioned as a factor encouraging teachers to use computers.

Ali expressed this need when he was doing his masters in TEFL and he found others better than himself in IT skills. He also referred to his need to find articles for his research as another factor driving him forward in learning how to use computer and later on how to use it his teaching to a limited extent.

4.5.9 Content of the Books

Content of books were mentioned as not appropriate for ICT integration as they were encouraging teacher talk and teacher centeredness as opposed to what is needed for a more ICT based classroom. This finding is an indication of teachers' awareness of suitability of computers for a more learner -centred class. However, I think, they are not aware of how to adapt the content of the books or their teaching methods to a more learner- centred approach to teaching.

4.5.10 Attitudes

As the words used by the interviewees and some of the respondents to the open-ended questions of the questionnaire implied all of them had a positive attitude toward ICT and its integration in teaching. However, this positive attitude did not lead to more incorporation of technology in their classes which is supported by Smeet's (2005) view that teachers may avoid integrating technology in their classes, for many reasons, in spite of perceiving the benefits of it in enhancing the quality of education. This is in contrast with Croxall and Cumming's in Jerkins et al' s (2009) findings that the food and consumer Science teachers' attitude about computer use was positive and this affected their ICT use in their classes.

The interviewees had also some concerns which indicated their cautiousness in this respect.

Mona expresses her positive attitude in this way:

"The ease of use of Internet for finding all sorts of information is great. It doesn't limit you to specific time and space, for example you don't need to go out to the library to get a book and find an article or something you can do so from the comfort of your house".

In spite of her positive comments she was also concerned about the existence of some inappropriate sites and the danger of getting addicted to using some websites that may have more destructive effect on us than constructive impact. Therefore the cautiousness in Iranian context was different from Barton et al' s study (2006) in which teachers had some reservations about the incidental use of computers as they suggested the need for planning in advance and booking the room.

A male respondent to the questionnaire provides this comment:

"Internet is like a blade with both sharp and blunt edges. It can be useful and harmful at the same time for our students because they don't know how to use it".

It's worth mentioning that all the interviewees suggested the need for having some control on students and the way they use the computer/Internet as a way to get round the problem of facing inappropriate sites. Most of them mentioned the need for raising awareness in students by teachers and parents and some of them stated that the way the students are brought up at home can determine their behaviour at school regarding Internet use.

To sum up, the results of the second phase of this study, that is the interview, revealed that in addition to fear of breaking them and the subsequent cost of repairing, lack of relevant software, inadequate IT knowledge and competence of teachers, and limited support from the head-teachers and language ability identified in Zamani's study in an Iranian context, there are many

other factors hindering teachers from ICT use. These include class time, work load, hardware problems, Internet connection, unavailability of some websites, teachers' resistance to change, not having a role model, and content of the books. These hindering factors all contribute to the limited use of computers /Internet in schools as well as home meaning that teachers only use some common applications with very low frequency with the highest frequency in terms of percentage being 25% of weekly writing on computers at home and at school.

5- IMPLICATIONS

As the results of this study and many of the other studies conducted in this area has indicated head teacher and school staff support is among the main factors contributing to ICT use by teachers. As mentioned above, Warschauer (2003) also referred to human support as one of the contributors to the effective use of computers. Thus, school staff, especially, the head teachers should provide teachers with their ongoing support regarding ICT use and encourage teachers to embark on the process of ICT integration in teaching.

Senior teachers in educational districts of each city in Iran are responsible for arranging meetings and inviting people expert in the field to give speeches and present their achievements or findings of the related studies conducted. Therefore, it would be a good idea if they arrange for speeches or demonstrations by some teachers who have experience in teaching with ICT (role models) to make other teachers aware of the benefits of ICT in enhancing teaching and learning and encourage them to use it in their teaching as much as possible.

6- LIMITATIONS AND FUTURE RESEARCH

There were several limitations in this study that should be taken into consideration before the findings can be generalized. Although the results of this study cannot be generalized beyond the context of EFL teachers in Iran, it can inspire other researchers to examine other related areas and the gaps that still exist.

First and foremost is the size of the population as it includes just EFL teachers from Kermanshah thus excluding those teaching in other cities or those teaching other subjects which by it minimize the chances of generalizing the result to other teachers in the country? Therefore, other researchers can include teachers of other subjects or teachers from across all cities in the country to see how the patters of ICT use by them may change.

Secondly, as this study was a small scale MA dissertation, the only personal characteristic of teachers that was considered in cross referencing was gender and its relationship with access to computer/Internet. Other characteristics such as age, experience and amount of training can also be taken into account for cross referencing in other studies. The relationship between gender and the pattern and the frequency of use can also be part of other studies conducted in the future.

Lastly, in addition to using questionnaire and interview for data collection, observation of teachers' classes and their extent of ICT use are recommended in future studies. This is because observation gives us more insight into what is actually going on in classes.

7- CONCLUSION

The goal of the present study was to gain more insight into the patterns of ICT use by the Iranian EFL teachers and the factors affecting integration of computers in schools by these teachers. The study was conducted in two phases encompassing the quantitative and the qualitative parts which included administering a self-developed questionnaire and conducting a semi- structured interview with six teachers from both school ICT users and non-users. 56 out of 120 EFL teachers filled in the questionnaire which included three sections on demographic

information, ICT use at home and ICT use at school. The questions in the second and third parts were based on a six-point Likert scale ranging from daily use to never use of some application identified as common and not specialized uses of computers/Internet.

The findings of the quantitative part of the study revealed that though most teachers use computer at home/school nowadays , only limited number of applications are used by them on a daily or weekly basis, with the rest being limited to monthly, yearly or rarely used categories.

Based on the findings of the qualitative part of the study, there are many factors that affect teachers ICT integration at school which include class time, workload, training, language, having a role model, physical resources, human resources, teachers' resistance to change and their attitudes toward ICT and its benefits.

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