

Coming to Terms with Technology: Iranian High School Teachers' Perceived Barriers and Proposed Solutions

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Abstract

The increasing use and popularity of technology in educational settings and smart schooling makes it indispensable to explore the teachers' perceived obstacles in its successful implementation. This study inspected the status quo of information and communication technology (ICT) integration in Iranian high schools and investigated the obstacles, as perceived by teachers, and their proposed solutions toward using technologies. In so doing, 311 English as foreign language teachers were requested to participate in this study. A researcher-made open-ended questionnaire was used to collect the data. Qualitative data were analyzed using a thematic analysis and the results of study indicated that on the whole, Iranian EFL teachers do not usually integrate ICT in their classes and the obstacles in implementing ICT in language classrooms could be classified into eight main themes: Lack of confidence, lack of competence, resistance to change, lack of time, lack of effective training, lack of technical supports, and negative attitude. The findings revealed that even though teachers realize the benefits of ICT integration, most of them are reluctant in integrating technologies in their classes because of the above-mentioned reasons. The findings may help teachers, policy makers, and syllabus designers put more focus on ICT integration and teachers' needs for obtaining better results in teaching and learning process.

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1.Introduction

The presence of technological tools in teaching/learning context has opened up new horizons and a groundswell of interest in how technology can best be managed to improve the efficiency and effectiveness of education at all levels, particularly toward smart schooling. Improvements and progresses in technology give students opportunities to use digital media to grasp and share knowledge and allow them to regulate their own learning process (Lam & Lawrence, 2002). Technology integration in language teaching is supported for a variety of reasons such as engagement, improvement in academic ability, paradigm shift, assessment shift, and collaborative learning enhancement (Riasati, Allahyar, & Tan, 2012). Rapid developments in information technologies have influenced education, and thus have led to alteration in the structure and implementation of education (Donmus, 2010). In discussing the effectiveness of using information and communication technology (ICT), Ndibalema's (2014) pointed out that in spite of "teachers' positive attitude, willingness, confidence, motivation, feeling, thinking, and belief towards ICT as a pedagogical tool" (p. 9), they did not integrate it in their teaching effectively. Also, low familiarity with ICT use among teachers was discovered to be a cardinal problem.

Language teachers may have different reasons for not using new technology in their classrooms; some keep on displaying reluctance and others remain fearful of trying new approaches which might have a negative influence on exam outcomes. It is supposed that some teachers prefer to stick to tried and tested methods which they believe enable them to predict and control results more easily rather than make use of technology to support learning and teaching. They appear to perceive using more innovative technology-based teaching and learning approaches as risky strategies. It seems that making a successful transition from traditional pedagogy to

technology-enriched instruction, teachers need to change their teaching approaches, roles, and responsibilities in the new era of learning and teaching to achieve successful teaching (Condie & Livingston, 2007). As technology integration is a deserving and quite new aspect of teaching/learning process, it seems that a significant number of teachers do not feel satisfied and proficient in its use. Nonetheless, Sánchez, Marcos, Gonzales, and GuanLin's (2012) research revealed that teachers have a highly positive attitude toward ICT but its use in class is scarce. In this regard, the present study is an attempt to investigate and identify the barriers that hinder the successful integration of ICT for English as foreign language teachers in Iranian high schools.

2.Literature Review

In the age of rapid growth of information technology, much greater attention has been paid to educational technologies in language teaching and learning. The value of technological tools and their related applications undoubtedly provides great opportunities to both educators and students. The use of ICT in the learning environment has become an unstoppable force in recent years and the benefits of ICT are manifested in educational quality. In other words, ICT impacts on a large section of education, from record keeping and school websites to the creation of online learning communities (Boudjadar, 2015; Law, 2008; Onyije & Opara, 2014; Yunus & Suliman, 2014). Mumtaz (2000) summarized the learning outcomes that result from the use of technology in the classroom as following: social growth, problem-solving, peer teaching, independent work, and exploration. Marzban (2011) also pointed out that ICT can improve the teaching of EFL learners by providing access to EFL pedagogy and expertise, culturally and linguistically diverse resources as well as innovative tools to integrate language and curriculum learning.

It seems obvious to state that computers offer great potentials in providing students with significant opportunities to improve language skills in a more interactive and engaging way. An extensive body of research has established the efficacy of Computer-Assisted Language Learning (CALL) in developing interaction in the field of language education (Al-Awidi & Ismail, 2014; Amiri, 2000; Boudjadar, 2015; Condie & Livingston, 2007; Jafarian, Soori & Kafipour, 2012; Marandi, 2010; Rostami, Akbari & Ghanizadeh, 2014). An overview of the developmental history of CALL shows that ICT tools have been variously and efficiently used at schools from the beginning of computers into the real world because of the fact that language teachers have always been the pioneer of applying innovative and revolutionary teaching equipment in their classes (Amiri, 2000). CALL developed parallel with the facilities provided by ICT. With the rapid development of technology, a number of scholars believed that learners can benefit from employing computers in language classes (Al-Mansour & Al-Shorman, 2012; Hwang, Huang, & Hsu, 2014; Jiang & Guan, 2014; Wagener, 2006). The use of ICT in the classroom has become crucial as it offers enormous and excellent chances for teachers as pioneers to perform in the new era of information technology. The important role of ICT in steady and fundamental development for all countries is undeniable and at the same time, its integration into the educational contexts is usually faced with some obstacles or difficulties known as barriers (Schoepp, 2005).

Findings of some previous studies suggest that the future of ICT is very much connected with the hidden barriers faced in using ICT in classrooms (Al-Awidi & Ismail, 2014; Vanderlinde, Aesaert & Van Braak, 2014). In a similar endeavor, Öztürk (2013) clarified some barriers in using technology and stated that financial constraints and users' lack of equipment along with knowledge and self-discipline should be given some consideration. In

harmony with this finding, Mumtaz (2000) reviewed the literature on ICT integration in the classroom and reported the following factors as determining ones in teachers' decision in implementing ICT in classroom: "access to resources, quality of software and hardware, ease of use, incentives to change, support and collegiality in their school, school and national policies, commitment to professional learning and background in formal computer training" (p. 319). Burke (2000) found out that the major source of preservice and inservice teachers' inhibition in using ICT and digital technology in English as a second/foreign language instruction was lack of digital literacy. Lam (2000) reported that teachers' belief plays significant role in their decision-making. The obstacles in incorporating technology in university classes in the Iranian context had been researched by Marandi (2010). She outlined some of these barriers, including cultural concerns which often lead to the "unpredictable blocking of internet sites" (p.180). She also referred to inadequate facilities, lack of IT support, students' unequal access to technology and anxiety in working with computers, rigid syllabi at schools and institutes and lack of communities of practice for language teachers as other problems in ICT use for educational purposes. Bordbar (2010) also stated that lack of time, support and facilities prevents teachers from using CALL in their classes. Daneshdoust and Keshmiri Hagh (2012) demonstrated that teachers were not ready for internet-based language courses. They suggested that teachers should be well-equipped with the knowledge and skills of smart technologies.

Some other researchers, however, argued that humans' attitudes on computer technology cannot be ignored and consequently ESL/EFL teachers' attitude towards computer technology must be taken into consideration (Albirini, 2006; Dashtestani, 2012; Mumtaz, 2000; Težci, 2009). Hedayati and Marandi (2014) investigated the obstacles, as perceived by the Iranian

EFL teachers, toward implementing CALL. The results showed Iranian EFL teachers did not usually integrate digital technology in their classes due to some factors like lack of teachers' training, teachers' resistance to accept technologies, lack of support from the stakeholders, facility constraints, and poor internet connections. In line with the mentioned obstacles, Nikolopoulou and Gialamas (2015) investigated teachers' perceptions of barriers in using computers. Lack of funding, shortage of equipment and resources for the application of ICT, lack of technical and administrative support, as well as inadequate training opportunities were among the major perceived barriers in their results.

In another attempt to identify the obstacles hindering the successful integration of ICT in teaching/learning process, Ertmer (1999) proposed a framework delineating "external (first-order) and internal (second-order) barriers to technology integration in education" (p. 47). By first-order barriers it means those factors that are extrinsic to teachers that may constrain integration, such as lack of adequate access, time, training, and institutional support. The second-order barrier, which is more intrinsic to teachers, includes teachers' pedagogical beliefs, technology beliefs, and teachers' willingness to change. These are teachers' personal beliefs that may prevent the implementation of technology integration in classrooms. As a completion to Ertmer (1999), Tsai and Chai (2012) argued that "the lack of design thinking by teachers may be the third-order barrier for technology integration" (p. 1057). The finding of another research done by Voogt (2010) has shown teachers who used technology extensively in their lessons tend to have a high level of confidence in pedagogical technology skills and focus on a learner-centered approach. They were more engaged in professional development activities and collaboration with colleagues than teachers who hadn't used technology very often.

It is obvious that there are convoluted and multifaceted relationships among these barriers and their links are to some extent complicated. This literature review indicates that some barriers, such as lack of knowledge and lack of accessibility, appear to be closely related to each other. Nikolopoulou and Gialamas' study (2015) revealed a direct significant effect of teachers' confidence with technology on factors such as lack of support and class conditions. In other words, "the greater the teachers' confidence with technology, the minor teachers' perceived barriers regarding support and class conditions" (Nikolopoulou & Gialamas, 2015, p. 285).

In a review carried out by British Educational Communications and Technology Agency (BECTA, 2004), it is illustrated that the relationship between barriers is complex and there is interlinking connections between them. The results of this review revealed that lack of access to ICT and time are nearly related to other barriers. Although ICT resources may be available, lack of time may not permit teachers to access them. It is also manifested that lack of training can be a factor for decreasing ICT use; for example untrained teachers are afraid of using technology appropriately and as a result do not implement it in their classes. Resources may be available but teachers cannot use them because of lack of skills or inservice training. It can be restated that the lack of access to resources leads to a reduction in training opportunities. A teacher may have abundant access but may not be able to use ICT in their classroom, because they do not know how to operate equipment. Teachers may need technical support or assistance to help them handle the class. In addition, lack of knowledge is an important barrier and is related to other barriers such as lack of training, lack of time, and lack of support. Wachira and Keengwe (2010) pointed to the lack of teacher training in appropriate technology use as a key reason for teachers' lack of knowledge in using technology. Thus, the major incentive to undertake the study was the need to

uncover the hidden and complex barriers and obstacles preventing the appropriate use of ICT by Iranian high school teachers.

3. This Research

The rapid developments in ICT have influenced both learning and teaching and consequently led to the development and use of smart school project in different countries like Iran. Beyond a shadow of a doubt, one of the factors that determines the educational development and innovation in general is the teacher as someone who uses the ICT investments for educational development. The above-mentioned review implies the lack of a thorough and comprehensive study investigating the barriers faced by Iranian high school teacher in using ICT for educational purposes. Most of the above-mentioned studies in the EFL context of Iran are of quantitative type that did not demonstrate the teachers' point of view vividly. Indeed, the need for a detailed and nation-wide study uncovering the inner voice of Iranian high school teachers in the use of ICT was felt. Therefore, the authors of this study have tried to conduct a comprehensive study and collect data from almost all around the country in discovering the major barriers concerned with ICT use among Iranian EFL teachers. In addition, teachers' proposed suggestion to remove the barriers were also reported. In this regard, the following research question was posed:

What are the barriers of ICT integration among EFL teachers and what are their suggestions to remove the barriers?

4. Method

4.1 Participants

The participants were 311 Iranian high school teachers. Stratified random sampling was used not only to come up with a more or less homogeneous population of participants but also to account for the typicality of the recruited teachers. The selection of participants was informed by consent from the respondents, emphasizing the voluntary nature of participation,

addressing concerns regarding privacy, anonymity and confidentiality. It was attempted to choose teachers from different parts of the country (almost all provinces) to grasp a comprehensive picture about smart schooling process. All the participants were qualified in Teaching English as a Foreign Language (TEFL) and were teaching in different English language teaching environments equipped with smart technologies. They were aged between 21 and 60 years and 179 were male and 132 female (Table 1).

Table 1
Demographic Information of Participants

	Categories	Numbers
Gender	Male	179
	Female	132
Age	21 - 30	25
	31 - 40	148
	41 - 50	123
	51 - 60	15
	60 +	0
Degree	B.A.	81
	M.A. Candidate	73
	M.A.	129
	Ph.D. Candidate	24
Teaching Experience	Ph.D.	4
	1 - 5	6
	6 - 10	37
	11 - 15	68
	16 - 20	106
	20 - 25	64
	25	30

4.2 Instrument

A researcher-made questionnaire was used to collect the data; open-ended questions through which the teachers could comfortably express their inner voice, concerns, views, and opinions pertinent to probable hurdles for successful ICT integration. Based on a thorough review of the related literatures on the barriers to ICT integration in the education arena, the

researchers intended to concentrate on the exigent problems among Iranian English teachers. The items of the questionnaire had been grouped into general sources of ICT use barriers such as lack of confidence, lack of competence, resistance to change, lack of time, lack of effective training, lack of accessibility, and lack of technical supports. The questionnaire consisted of nine different Yes/No and open-ended written questions. The original instrument was prepared in English and it was rendered into Persian (i.e., participants' mother tongue).

Before administering the questionnaire to the participants, it was piloted and the result was assessed by three experts in the field to ensure the content validity and reliability of the instrument.

4.3 Procedure

A total number of 327 questionnaires were distributed over a period of fifteen days in April, 2014. Stratified random sampling was carried out not only to come up with a more or less homogeneous population of participants but also to account for the typicality of the recruited teachers. Meanwhile, Dörnyei (2007) believes that stratified random sampling is "a particularly effective method for research with a specific focus as a combination of randomization and categorization" (p. 97).

The researchers themselves held the responsibility of administering the questionnaires. The questionnaires were delivered both in person and by mail to each participant. The head teachers of each province coordinated with their colleagues throughout the province. They were requested to ask nearly 10 other volunteer colleagues to take part in the study. After explaining the purpose and format of the research on the phone and via email, some of the teachers rejected participating in the study. After elaborating the main aims of the study and the teachers' focal role in identifying the ICT barriers, some of them accepted to participate in the study. For every province, a particular

folder had been specified. Then, teachers sent their email addresses and the questionnaire was forwarded via email. A total of 311 questionnaires were collected. The questionnaires were collected in a period of four to six weeks after distribution. Sixteen out of 327 questionnaires were not usable for data analysis because they were not completed appropriately. Only 311 were analyzed, representing a valid response rate of 95.10 %. Cohen, Manion & Morrison (2000) assert that a response rate of between 40% and 50% is adequate.

5. Results

The data were analyzed through thematic analysis of the teachers' responses to the questions. The high frequency barriers indicated by teachers were reported along with the type of suggestions offered to remove the barriers.

The first item is as follows:

1. As an English teacher, do you have any fear or apprehension in using technology for your classes? It seems that some English teachers avoid using computers and modern technology in their classroom. Do you think lack of interest or self-esteem can be a reason of not using them? How can English teachers overcome this problem?

Two hundred and thirty-one teachers replied yes to the first part of this question which means that they are afraid of using technology in language classes. For the second part of this question, 290 teachers answered yes which means that lack of interest and self-esteem is a reason of not using technology in classrooms. By scrutinizing the last part of the question, other problems and suggestions were derived. The problems mentioned by teachers are:

- Lack of ICT knowledge and computer literacy;
- Lack of motivation;
- Technophobia or fear of advanced and modern Technologies;
- Lack of ICT syllabus design in school and insistence on traditional methodology;

Coming to Terms with ...

- Insufficient time to master new software to integrate ICT in classes.

The high frequency suggestions mentioned by EFL teachers are:

- Changing teachers' point of views by describing the benefits of ICT;
- Holding up inservice classes to make progress through trial and error;
- Producing electronic contents and making educational CDs available;
- Teaching ICT as a compulsory course;
- Lowering teachers' workload by giving responsibilities to skillful students;

The second item in this questionnaire is as follows:

2. Do you think communication between students and teachers through Email, Weblog, and social educational networking (such as *Roshd* or *Edmodo*) can be considered as concerns for teachers? How can English teachers overcome this problem?

Analysis of the participants' responses to the first part of this question leveled that 260 teachers replied yes which indicated that emails, weblogs, social educational networking can be considered as concerns or worries. According to the gained results, the high frequency suggestions pointed out by EFL teachers are:

- Promoting teachers' ICT skills and boosting their confidence;
- Changing the contents of textbook on the basis of multimedia;
- Establishing a blog for interacting ideas and writing their thought on weblogs;
- Allocating special privileges as Brownie Points for those who use ICT;
- Dividing and involving students into group projects via mails or websites;

The third item in this questionnaire is as follows:

3. Are EFL teachers reluctant in using computer technology for their educational goals? What do you recommend to encourage them to accept the changes from traditional to ICT-based classes?

Three hundred and two teachers replied yes to the first part which means there is resistance to change in using ICT among EFL teachers. The teachers' suggestions to encourage high school teachers are:

- Changing teachers' annual evaluation scores;

- Distributing free software among teachers;
- Solving shortage of time;
- Holding in-service class and specific workshops for promoting ICT skills.

The fourth item in this questionnaire is as follows:

4. Do you believe that the use of technology makes more efficient use of teaching time? Can insufficiency of time be a reason for not using multimedia in your classes?

For the first part of the question four, 147 teachers replied yes that shows technology makes more efficient use of teaching time. For the second part, 264 teachers believed that lack of time can be a reason for not using multimedia.

The fifth item in this questionnaire is as follows:

5. Is ICT training through inservice classes appropriate for educational needs in the classroom? If not, what other ways do you suggest?

Two hundred and eighty-five teachers replied no which means in-service classes are not appropriate for ICT training. The other ways to help teachers in using ICT for educational purposes are:

- Providing ample ICT facilities during inservice classes;
- Launching Educational websites and encouraging for creating own weblogs;
- Distribution of CDs or complementary books;
- Holding specific workshops;
- Changing the evaluation process of the course.

The sixth item in this questionnaire is as follows:

6. Do you have a minimum of hardware and software facilities in your classrooms? Do the peripherals and equipment such as Smart Board, computer, Internet, printer, and so on have a cardinal role in teaching English? Do you agree that existing ICT resources are not enough? What solution do you offer?

Two hundred and seventy-six teachers replied no to the first part of this question. It means that there exists a lack of ICT infrastructure. For the

second part, 194 teachers answered no, which shows these peripherals and equipment are not effective in Iranian contexts. The third part was articulated by 282 yes that demonstrates that the available ICT resources are not sufficient. Other suggestions mentioned by EFL teachers related to this item are:

- Providing Smart Boards in the classrooms;
- Updating computer systems and software;
- Holding Teacher Parents Association (TPA) for volunteers;
- Calling out the private sectors to involve and cooperate for ICT provision;
- Providing computer system and printer in teachers' staff room.

The seventh item in this questionnaire is as follows:

7. What can you do if you encounter difficulties in the process of teaching via ICT? Is the presence of a qualified specialist for technical support, repairing, and system maintenance vitally required?

For the second part of the question seven, three hundred and seven teachers replied yes that represents a skillful specialist for technical support, repairing, and system maintenance is required.

Grasping the basic knowledge of ICT as independent teachers and asking skillful students to give hands to the teachers in ICT affairs as coworkers or monitors are the suggestions mention by EFL teachers.

The eighth item in this questionnaire is as follows:

8. How do you feel about using ICT in your teaching? What's the purpose of your ICT use?

Unfortunately, participants in this study just answered the first part of this question and ignored the second part!

The teachers' attitudes towards this item are:

- A pessimistic view of ICT among teachers at high school context;
- Lack of practicality and reliability;
- Lack of motivation for teachers;

- Lack of enthusiasm and determination;
- Fear in which students are more highly skillful;
- Lack of inspiring teachers' confidence in upgrading ICT.

The ninth item in this questionnaire is as follows:

9. In addition to the aforementioned barriers, please specify other obstacles that you think can be added.

In question nine, the teachers were requested to illustrate other barriers in addition to aforementioned barriers. Some of the high frequency ones are:

- Teachers' negative point of views as a major hindrance to ICT integration;
- Lack of allocating ICT equipment among all schools equally with modern devices;
- Lack of attempts to augment curricula with ICT usage;
- Parents' beliefs about addictive and destructive influence of ICT as a kind of culture shock;
- Lack of freedom for teachers in selecting and covering curriculum materials;
- Lack of solidarity among EFL teachers in ICT use if the progress is to be made.

6. Summary of the Findings

In order to have a better picture of the findings of this study, the main themes related to the barriers and obstacles preventing the appropriate use of ICT along with the suggestions for overcoming these problems are summarized in this section. The most cardinal obstacles are:

1. Lack of ICT competence and computer literacy;
2. Lack of awarding motivation to enhance their ICT abilities or skills;
3. Technophobia or fear of advanced and modern technologies.
4. Lack of time to accomplish all aspects of ICT in the classroom;
5. Parents' anguish at the harmful or addictive influence of ICT on their students;
6. Traditional methodology and excessive attention on University Entrance examination;

7. Teachers' age: The more experienced the less likelihood & tendency to use ICT;
8. Lack of accessibility and insufficient ICT facilities and no access to Internet;
9. Teachers' fear of transition from teacher-centered to student-centered classes;
10. Teachers' financial problems and low incomes that harm their zeal and enthusiasm;
11. Lack of effective inservice classes;
12. Teachers' negative attitudes and lack of confidence;
13. Lack of teachers' autonomy;
14. Lack of skillful or knowledgeable ICT technician.

In addition, the main themes emerged from the teachers' suggestions to overcome and remove the obstacles are:

1. Changing teachers' point of views by describing the benefits of ICT.
2. Holding up inservice classes or online virtual and interactive classes;
3. Changing the contents of textbooks on the basis of multimedia.
4. Visiting successful smart schools that are prominent in ICT integration;
5. Creating websites for teachers to share their thoughts and experiences;
6. Considering some points in students' final evaluation on the basis of ICT integration;
7. The priority must be based on solving budget deficit in ICT integration;
8. Before teacher's arrival, ICT systems should be ready for using in advanced;
9. Preparing appropriate software along with installing hardware with up-to-date systems;
10. Asking skillful students to give hands to the teachers in ICT affairs as coworkers;
11. Holding Teacher Parents Association (TPA) to justify the benefits of ICT.

7. Discussion

This study aimed at finding the probable obstacles encountered by Iranian EFL teachers in using ICT for high school purposes. The results revealed that teachers' lack of confidence, lack of competence, resistance to change, lack of time, lack of effective training, lack of ICT resource accessibility, lack of technical supports and negative attitudes are among the most cited problems mentioned by EFL teachers in dealing with technology and ICT in their language classes.

The analysis of the data indicated that teachers' negative attitude in using ICT was a significant barrier among Iranian EFL teachers. Some teachers believed that technology was an unsettling tool and refused to change their curriculum on the basis of ICT. Some others reported that traditional teachers were anxious or worried of losing their authority in the classroom. Nearly 96% of the participants believed that teachers' technology skills and digital literacy should be bloomed to spark their interests and confidence in ICT skills. Some participants claimed that there are no difference between the teachers who utilize ICT in the classroom and those who don't use it. It makes them feel less confident, enthusiastic and positive about effective implementation of ICT. Resistance to change was also a vital factor for reluctant teachers' use of new technologies.

A cursory look at the obstacles mention by EFL teachers in using ICT makes it clear that the majority of the problems are of the external barriers or are caused by a kind of external factor. Lack of competence, resistance to change, lack of time, lack of effective training and lack of ICT resource accessibility are among the high frequency problems which are external to the teacher for which they have no control. In addition, they have no freedom in making even small changes in school syllabi and materials. They are also evaluated based on the schools and institutes' regulations and if they do not

follow the stated rules they will face some unpredictable circumstances. In this regard, EFL teachers find the use of ICT for Iranian context impractical and unreliable as it does not facilitate the process of learning and teaching and make a sort of problem and hurdle.

A deeper look at the major obstacles mentioned by EFL teachers reveals that there are interlocking relations among the barriers. Teachers are afraid of using ICT in their classes because they lack the sufficient knowledge and competence in using them and there is not enough time for utilizing them for educational purposes. Besides, schools are not equipped with ICT specialists or technicians to support teachers in preparing materials and providing enough help in handling the technology and amending the possible problems in ICT use. For these reason teachers are reluctant to change from traditional methods to more technology-based teaching and learning.

The majority of teachers reported that technology makes it possible to make more efficient use of teaching time which is to some extent contrary to the findings of this study. The intriguing point is that the same teachers do not integrate ICT in their classes. It seems what happens in the school contexts is totally different from what's language teachers' expectations. Language teachers believe that technology can help them and language learners make the most out of their time in schools, but school regulations, facilities, infrastructure, syllabi and inappropriate or insufficient in-service classes do not make it possible. Parents' belief about the destructive effect of technology, furthermore, is another problem faced by teachers in utilizing ICT for educational purposes.

By delving into the stated suggestions it was uncovered that the majority of teachers emphasized on promoting ICT literacy as a priority. Most of the teachers focused on time limitations and the burden on scheduling sufficient ICT time in their teaching carriers. One of the major problems with the

implementation of new ICT in classes was insufficient or ineffective amount of inservice training programs for EFL teachers. It can be restated that inservice classes for teachers in Iranian contexts is not appropriate. In addition, nearly all teachers agree that the presence of a skillful technician as a guide for helping, maintenance and repairing of ICT devices is highly necessary. Therefore, it can be stated strongly that without technical support in class, teachers may not overcome the unexpected obstacles preventing them for utilizing ICT. It seems that teachers' lack of confidence can be rooted in their fear of failure or lack of technology literacy, which made them feel worried or even brooding. In other words, if the teachers could not rely on their IT skills or knowledge, they may be afraid of using technology in the classroom. One of the probable reasons for lack of teacher collaboration and lack of cooperation among teachers can be seen in school principle mandates and school environment emphasizing the improvements of examination results. Another reason for negative attitude of using ICT may be searched in their uncertainty of efficiency and usefulness of technology, a feeling of not being certain about the efficacy of multimedia in their classroom.

Some researchers' findings confirmed these statements such as lack of teacher collaboration and lack of cooperation among teachers (Ertmer & Otterbreit-Leftwich, 2010), administrative mandates to improve examination results (Goktas, Yildirim, & Yildirim, 2009), teachers' beliefs about adapting new technology (Peeraer & Van Petegem, 2012), lack of motivation, self-belief and appropriate ICT models for teachers (Prasad, Lalitha, & Srikar, 2015) and teachers' attitudes toward the usefulness of technology (Lam, 2000). Some other studies are consistent with teachers' lack of technology skills and digital literacy. For example, Marandi (2010) highlighted the use of rigid syllabi at schools and the lack of communities among EFL teachers or DelliCarpini (2012) outlined teachers' skills. Unal

and Öztürk's (2012) study pinpointed the effect of traditional approaches on teachers' practices as a barrier. Fathi Vajargah and Saadattlab (2014) concluded that the lack of motivation to use computers is a major barrier and Yildirim (2007) revealed that teachers' technology literacy should be bloomed that spark their interests and confidence in ICT skills.

In the light of mentioned discussion about technology barriers from teachers' perspective, ICT can have an enlightening and illuminating influence on both teaching and learning if it is used under proper conditions including appropriate sources, training and support. Therefore, for successful ICT integration, teachers' voice, and teachers' acceptance should be heard with a high priority. It is of importance to note that teachers play an undeniable role in ICT implementation. These barriers constitute a great part of any teacher's challenges and dilemmas that may come up during their teaching career.

8. Conclusion

This study was an attempt to uncover Iranian EFL teachers' barriers in using ICT for high school context. Findings reveal that even though teachers realize the benefits of ICT integration, most of them are reluctant in integrating technologies in their classes because of the above-mentioned reasons. Lin et al. (2012) and Goktas et al. (2009) proved this statement in that the fewer the barriers in using ICT facilities and equipment, the more likely the communities (teachers and students) practice ICT in schools. So, improvements in the school curriculum, infrastructure upgrades, availability of software programs and supporting learning materials is recommended. In addition, encouraging positive attitudes about the significance of integrating ICT into instruction via workshops or suitable training courses seems to be an injection for EFL teachers to be filled with joy in the status quo.

The findings can also help school authorities in the implementation of professional development programs. This study may help school leadership develop strategies that work best, and can help teachers smoothly to become more directly involved in their own teaching. So, removal of these hurdles will help to enhance technology integration into the education. Based on the results of this empirical research, further researches can be conducted in several areas to aim for more effective integration of ICT into learning activities in schools. Such studies can focus on teachers' age, gender and experience, as well as students' perception of ICT in the curriculum and policy-makers' perspectives for ICT in Education. The study recommends that future researchers need to consider the in-depth qualitative studies such as classroom observations and in-depth interviews to investigate the level of ICT use by teachers. Additionally, the challenges or barriers to ICT integration from administrative insights can be an area worth further investigation in future research.

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