Iranian EFL Teachers' perspectives on their use of ICT in their Teaching practices: A multiple Case Study

Parivash Mozafari, David Wray

University of Warwick, Coventry, United Kingdom

P.Mozafari-Goroorani@warwick.ac.uk, D.J.Wray@warwick.ac.uk

Abstract. Within a socio-cultural epistemology and in an interpretivist qualitative paradigm, this study aims to explore the perspectives of practicing EFL (English as Foreign language) teachers on the integration of Information and Communication Technology (ICT) into their teaching in Iranian high schools. This study also aims to explore the individual and socio-cultural factors which have influenced and shaped the perspectives and perceptions of these teachers about ICT integration. Due to the fact that this study is in the very early stages of data collection and given the limited number of Iranian studies on the topic, this paper explores the world literature which bears upon the various opportunities and limitations for the integration of ICT into the teaching English as a foreign language (EFL) education. Arguing from a change or innovation perspective on integrating ICT in schools (in general), some of the well documented key factors that can affect the successful implementation of ICT are outlined. From amongst those factors, the role of the teachers and their pedagogical technological content knowledge (TPACK) emerge from the literature as essential factors.

Keywords: ICT, EFL, Communicative Language Teaching, AT, SCT, mediation, TPACK

1   Introduction

It has been argued that even in the EFL classrooms with the most communicative approaches, given the limited time available (in the Iranian case, 2 hours a week), students have little opportunity to interact in English (Demo, 2001; Blake, 2008). Also due to the lack of exposure to authentic language and context, second or foreign language classrooms are unlikely to develop learners' communicative skills in the target language (Demo, 2001). Technology and multimedia have the capacity to provide increased exposure to authentic language and to enhance learning by providing opportunities for developing communication skills (Larsen-Freeman and Anderson, 2011). They also have the potential to provide the opportunities for students and teachers to communicate within their own community or with the outside world beyond the restrictions of time or place (Blake, 2008; ibid). This could be possible through social networking websites, emails, online discussion rooms and wikis, blogs,

and online chat rooms in less stressful atmospheres (Blake, 2008; Larsen-Freeman and Anderson, 2011). Additionally, technology can increase students' motivation and provide the opportunity for learners' self-directed learning and sense of autonomy (Thorne, 2006; Larsen-Freeman and Anderson, 2011). Furthermore, with the utilization of ICTs, learners and teachers can use teaching materials as many times as they wish (Davies et al, 2005; Larsen-Freeman, 2011). Technology, as such, if effectively integrated into the curriculum, could be a powerful teaching learning tool in and out of the classroom.

English language has been included as part of the Iranian school curriculum as a compulsory subject taught from Grade 1 in junior high schools (age 11-14). English in Iran is considered and taught as a foreign language. With the increasing importance of English as the language of international communication and a growing recognition of the challenges and realities of the information age, and an increasing awareness of the necessity to change and improve the preparation of students to meet the challenges of the 21st century, in the Iranian National Curriculum Plan, the importance of a communicative approach to foreign language teaching and the use of information and communication technologies to improve teaching and learning in schools have been highlighted. But Moheyuddin Bahram Mohammadian, the Deputy Minister in Iranian Ministry of Education, and the head of the Iranian Organisation for Educational Research and Planning, in an interview in Mehr News (2010, 26th Nov.) reported that Iranian EFL teachers' technology use in schools is limited.

The importance of this study comes from the fact that in recent years -marked as the information era- many countries have incorporated the use of information and communication technology (ICT) in their education (e.g. Albirini, 2006). But in spite of the fact that its significant role, especially in improving foreign language education, has been emphasised (e.g. Davies et al, 2005; Hennessy, et al, 2005; Blake, 2008; Larsen-Freeman and Anderson, 2011), there seems to have been little progress in integrating ICT in education (Fullan, 2013). By the same token, it is important to know why the Deputy Minister of Education in Iran can still claim that the only media by which English is taught in Iranian schools is through textbooks. What is amiss?

2 Review of the literature

2.1 ICT-mediated Communicative EFL Pedagogy and Socio-cultural theory

The term ICT stands for information and communication technology. It embraces a range of technical media from hardware (desktop computers, laptops, netbooks, tablets, mobile phones, projection technology, data logging and digital audio and visual equipment), software applications (generic software, multimedia resources) to information systems (Intranet, Internet, cloud computing) (Hennessy et al, 2005).

According to Kern (2006) research studies that are concerned with technology use in language learning have mainly focused on the role of technology as a medium. It could also be said that, in recent years, the literature on second and foreign language learning reflects a move away from a cognitive viewpoint which sees language as a purely psychological and cognitive phenomenon and places considerable focus on the

learner, towards studies within the framework of a social constructivist perspective which are concerned with understanding the acquisition process within sociocultural settings (Brown, 2007; Gass and Selinker, 2008). In the current paradigm shift in foreign/second language education, socio-cultural theory (SCT) 'as a theory that simultaneously considers mental and social factors in learning' is being developed as an appropriate theoretical framework for investigating learning processes. Based on SCT, learning could be contextualised by collaborative activities and tasks, and be mediated by semiotic tools such as language and other tools. In this view, beside other mediating tools such as technology, language not only functions as a medium of communication but as a mediator of learning (Lantolf, 2005).Within this framework, strong versions of communicative language teaching (CLT) such as task based instruction (TBI) and project based instruction (PBI) are suggested as approaches that can provide effective bases for foreign language teaching. These approaches stress language use both as a communicative tool and as a mediating tool for learning, rather than merely being an objective of learning, and are often based on activity theory (AT) as a primary concept in socio-cultural theory. Activity theory posits that an activity or communicative task provides the contextualising framework for interaction and that is motivated by a biological or social need or desire (Magnan, 2008). From an AT perspective, ICT is considered as a tool that by providing the means and ground for interaction between humans and their environment, mediates educational interaction, and promotes collaborative learning (Lamy and Hampel, 2007). As such, there appears to be a natural affinity between the main pedagogical concepts of Socio-cultural theory (SCT) and specially its primary concept -activity theory- and the major components of communicative language teaching (CLT) such as interaction, collaboration, group work, negotiation of meaning, information gap activities, teacher as facilitator and coach, and self-regulation (Brown, 2007; Magnan, 2008; Gass and Selinker, 2008)

2.2   The importance of teachers' cognitions

"Educational change depends on what teachers do and think, it's as simple and as complex as that. It would all be so easy if we could legislate changes in thinking." Fullan (2007: 129)

   While the availability of technological tools and their affordances along with other factors seem to be essential in enhancing or limiting learning opportunities, teachers' perspectives towards these technical artifacts may be more important than the tools themselves in the integration of ICT into language pedagogy (Lamy and Hampel, 2007). This perspective supports Kern's (2006) and others' calls for research into the teachers' roles and their perceptions and perspectives on technology use in education.

   As underlined by Fullan above, for a successful design and practice of technology-integrated-FLE, the individual teacher's understanding of the change knowledge, technical tools' affordances and their pedagogical decisions are determining factors. Fullan (2013) in discussing the integration of technology into teaching and learning activities assigns the most important role to teachers and argues "teachers are needed, but it is new role that is required--the teacher as change agent". Kern argued that suc-

cessful technology-mediated-pedagogy "has been repeatedly shown to depend largely on teachers' efforts in coordinating learners' activities" (p. 200). Kern's conclusions supported a call for a descriptive study of second language teachers and their experiences in integrating technology. There is, indeed, a substantial body of evidence that regards teachers' roles as a key factor influencing the integration of ICT in education (Albirini, 2006; Kern, 2006; Chen, 2008; Park and Son, 2009). These studies have argued that teachers' perspectives and attitudes towards technology and media may be a major factor that influences their patterns of behaviour regarding the initial or future use of ICT in their teaching experiences.

On the other hand, there is evidence (Kim, 2002; Peeraer and Petegem, 2011; Rahimi and Yadollahi, 2011) that teachers' positive attitudes towards ICT do not ensure their actual use of ICT in teaching. These interpretations are consonant with some other researchers (Afshar et al, 2009; Altun, 2002) who have suggested that teachers' attitudes toward technology are related to teachers' ICT literacy. Kim (2002) found that although teachers expressed strong positive attitudes and enthusiasm for using ICT in their study, they actually were not able to use ICT in their classrooms due to insufficient ICT knowledge, time constraints, technology anxiety and lack of confidence. As such it seems a reasonable argument that teachers' attitudes towards using ICT are linked to teachers' ICT competence; as teachers who are more competent in using technology, have been shown to be more willing to integrate it into teaching (Altun, 2002; Rahimi and Yadollahi, 2011).

In addition to ICT knowledge and skill, teachers need to have sufficient knowledge of ICT pedagogy. In this regard Baylor and Ritchie (2002) stated, ''regardless of the amount of technology and its sophistication, technology will not be used unless faculty members have the skills, knowledge and attitudes necessary to infuse it into the curriculum'' (p: 374). It means that the knowledge and capability of teachers for meaningful exploitation of ICT for pedagogical purposes is a determining factor. The degree to which teachers see the usefulness and relevance of these innovational changes from a practical task perspective, determines the likelihood of them embracing these changes.

2.3   ICT in Iranian schools

A number of the Iran specific studies (e.g. Shahamat and Riazi, 2009; Rahimi and Yadollahi, 2011; Dashtestani, 2012) have indicated that teachers generally expressed positive views about the integration of ICT, but that their technology use in classrooms was limited. The interpretations offered by the researchers about this, although they are resonant with the literature, are mainly based on the results of surveys using questionnaires to explore teachers' beliefs and perspectives about technology use in teaching. Indeed, as these Iranian researchers acknowledge, these studies with a typical quantitative design and methodology fall short of providing a deep understanding of the teachers' underlying beliefs and perspectives or of providing insight into how and to what extent technology is used in EFL classrooms. Evidence about this issue is scarce. Thus, as suggested by the Iranian researchers (e.g. Rahimi and Yadollahi, 2011), qualitative studies need to be done to investigate Iranian teachers' perspectives, beliefs and professional knowledge relating to the use of ICT, in reference to

classroom teaching-learning practices. As such, in order to contribute to bridging this gap, the current study will be conducted to explore and obtain an inside knowledge of Iranian high school EFL teachers perspectives and perceptions about the various factors that might have promoted or prevented the integration of ICT in their teaching practices. I am also interested in understanding and describing the classroom processes and practices of ICT-mediated language teaching/learning and how ICT (if any) is used by these teachers in their classroom. And finally to interpret how individual teachers' thinking or cognition relates to their classroom practices and how they interact in the broader social context. In so doing the following main and sub research questions will be addressed.

Research Questions:

1. From the perspectives of teachers of EFL, how is ICT currently used as a medium for teaching English as a foreign language in Iranian high schools?

   (a) What ICT tools do these teachers have access to?

   (b) How do teachers currently use those tools?

2. What are the attitudes of a group of Iranian high school teachers towards using ICT in teaching and learning English?

   (c) What factors do they perceive as either inhibiting or promoting their use of ICT in teaching English in their schools?

   (d) To what extent do these Iranian high school teachers of English feel that they have the requisite knowledge and skills to use ICT in the classrooms?

3 Research design and methodology

My aim is to answer my research questions and to examine this particular educational phenomenon within a socio-cultural epistemology and in an interpretivist qualitative paradigm. And within this paradigm, I chose to use activity theory as an analytical tool. As it is clear from the research questions and purpose of the study, the unit of analysis in this study is the activity of integration of ICT in high schools. But based on activity theory an activity could not be analysed without considering its actors, their motives, as well as a dialectic and dynamic interaction that exists among them and other contextual, social, historical factors that exist within and beyond an activity system. As such, for the overall purpose of this study and to provide various perspectives and multiple sources of information about the phenomenon, a multiple-case study has been planned, and to place a boundary around my cases, the multiple cases that I chose for this study are an approximate number of five English teachers in 5 Iranian high schools across the capital city of Tehran, with each teacher being treated as one case. Data collection will be conducted in Fall 2013. During this time, I will collect data from various sources to provide both a thick description of the phenomenon under study and to explain and interpret the phenomenon with reference to "how" and "why" questions.

The choice of teachers and their EFL classroom practices has been made for two reasons. Firstly, because I am interested (for the purpose of my study) in the situations in which students had just passed two years of elementary (and beginners) EFL instruction, and seemed to be ready in terms of age group and their English language ability for ICT mediated communication and interaction; and secondly, because I intended to bridge certain gaps in the earlier quantitative studies that had been done with teachers of the same age level in Iranian high schools.

3.1 Methods and procedure

The present study will be undertaken in three sequential phases:

- Data from previous research surveys of teachers at the same levels in high schools, as well as national educational policies and curriculum both at the national and school level as sources of information, will be investigated.
- Observation of the technological infrastructures in the participating schools as well as the observation of EFL classrooms will be conducted in the context of gaining the perspectives of teachers. Observation is essential and will enable me to get a sense of context and stimulate subsequent discussion with the observed teachers.
- Individual (face to face) semi-structured interviews with the participating teachers to obtain detailed information regarding their perceptions and opinions as well as other relevant information about integration of ICT that could add to the understanding of the situation.

4 Implications of the study

This study is believed to be the first qualitative study of this topic in the context of Iranian high schools. With its focus on the how of ICT integration and the teachers as 'change agents' and issues related to them, this study can provide Iranian policy makers with useful information about preparedness, skills, experiences, perspectives and perceptions of teachers about the implementation of ICT in EFL pedagogy. As such, it could be said that it can add to the relevant knowledge in the daunting task of integrating ICT that in turn can lead to improvements in EFL education that may be of potential benefit to the stakeholders and the society.

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