ENGLISH LANGUAGE TEACHERS' PERCEPTIONS ABOUT AN ONLINE BASIC CALL TRAINING

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Approval of the Graduate School of Social Sciences

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ABSTRACT

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This case study examined the factors affecting a group of Turkish L2 English in-service teachers' use of technology in their language classes and their perception of a four-week online CALL training they received on a voluntary basis. Through self-report data collected via interviews and reflection reports, the researcher aimed to investigate the potential of online in-service CALL training for training language teachers to integrate CALL in their classrooms. The findings pointed at many factors that impinged on teachers' technology integration. CALL learning in the cyberspace was also found to be too challenging for some teachers devoid of computer skills to manage the online experience. Coupled with the teachers' desire to learn and practice CALL in situated contexts, the researcher came up with a sequential procedure for online in-service CALL training which consists of various stages until L2 English teachers gain the competence to successfully monitor their CALL learning in the

online environment. This procedure is also proposed to be a valuable means for the transfer of knowledge and skills gained in CALL training to real language classroom.

Keywords: Computer Assisted Language Learning, CALL, Language Teachers, Teacher Education, Technology Integration

ÖZ

İNGİLİZCE ÖĞRETMENLERİNİN ÇEVRİMİÇİ BİLGİSAYAR DESTEKLİ DİL EĞİTİMİ ÜZERİNE ALDIKLARI HİZMETİÇİ EĞİTİM HAKKINDAKİ GÖRÜŞLERİ

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Durum çalışması desenini benimseyen bu çalışma, bir grup Türk İngilizce öğretmenin teknolojiyi sınıf içinde kullanmalarını etkileyen faktörleri ve gönüllü olarak katıldıkları bilgisayar destekli dil eğitimi (BDDE) üzerine aldıkları dört haftalık çevrimiçi eğitim hakkındaki düşüncelerini araştırmıştır. Görüşme ve yansıtıcı düşünme raporlarıyla toplanan veriler, çevrimiçi öğretmen eğitiminin dil öğretmenlerinin bilgisayar destekli dil eğitimini sınıflarında uygulamaları için öğretmen eğitimindeki rolünü incelemeyi hedeflemiştir. Sonuçlar öğretmenlerin teknoloji kullanımını olumsuz yönde etkileyen birçok etken olduğuna işaret etmiştir. İnternet ortamında bilgisayar destekli dil eğitimi üzerine alınan bu eğitim, bazı bilgisayar becerilerinden yoksun öğretmenler için zorlayıcı bir deneyim olmuştur. Öğretmenlerin bilgisayar destekli dil eğitimini sınıf ortamlarında öğrenme ve uygulama ihtiyaçlarını da göz önüne alan araştırmacı, öğretmenlerin bilgisayar destekli dil eğitimini çevrimiçi ortamda öğrenme deneyimlerini başarıyla yönetme becerisini kazanana kadar çeşitli aşamalardan geçmelerini gerektiren aşamalı bir hizmetiçi eğitim yöntemi öne sürmüştür. Bu yöntemin aynı zamanda eğitimde

kazanılan bilgi ve becerilerin sınıf ortamına aktarılması için de iyi bir fırsat oluşturduğu söylenebilir.
Anahtar Kelimeler: Bilgisayar Destekli Dil Eğitimi, BDDE, İngilizce Öğretmenleri, Öğretmen Eğitimi, Teknoloji Uygulamaları

To My Family

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TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

LIST OF ABBREVIATIONS

CALL	Computer Assisted Language Learning
CMC	Computer Mediated Communication
ICT	Information and Communication Technology
IT	Information Technology
ELT	English Language Teaching
EFL	English as a Foreign Language
ESL	English as a Second Language

CHAPTER 1

INTRODUCTION

This chapter presents background to the study, statement of purpose and significance of the study followed by research questions.

1.1 Background to the study

CALL and teacher education, as an alluring area of research, have been gaining wide attention and been exposed to an ever-mounting body of research in the last decade. Due to the epoch-making development of ICT and its huge implications for teaching and learning foreign/second languages, there has been a high demand for training technology-savvy teachers who have "sufficient grounding in CALL theory and practice" (Stockwell, 2009, p.1) and can make informed decisions about implementing CALL in optimal ways in their own language teaching contexts. Additionally, it has been an indispensable need to train language teachers on how to use CALL effectively since "technology has become integral to the ways in which L2 professionals teach, create materials and even the way they conceptualize the profession in the 21st century" (Chapelle & Hegelheimer, 2004, p.300). As a concomitant of the recent move towards technology integrated language classes and need for teachers equipped with techno-pedagogic competence (Guichon & Hauck, 2011) , various approaches to CALL teacher education have been adopted by a myriad of CALL professionals, practitioners and researchers, one of which is the online approach to be discussed further in detail below.

Despite the general trend towards the "bottom-up and for the most part ad-hoc" (Hubbard & Levy, 2006, p.4) manner of CALL preparation followed up until relatively recently, there have been newly motivated attempts to train language teachers to infuse technology into their classes in more structured and planned ways in the form of in-service trainings, "bread-first", "depth-first" or "integrated" CALL courses (Hubbard, 2008, p. 181-182), "seminars", "certificates", and "CALL

graduate degrees" (Hubbard & Levy, 2006, p. 2). In addition to many pre-service CALL courses, (e.g., Bauer-Ramazani, 2006; Hegelheimer, 2006; Peters, 2006), there have been many enterprises to train in-service English language teachers (e.g., Chao, 2006; Jones & Youngs, 2006; Olesova& Meloni, 2006; Rickard, Blin & Appel, 2006; Wong & Benson, 2006). The efficacy of different "approaches and processes in CALL teacher education" (Hubbard, 2008, p. 180) has been investigated in these studies, which yielded different results but presented compelling evidence that in-service teachers especially were in need of CALL guidance and training in their initiatives to incorporate technology into their classes.

As one of the approaches, some of the studies (e.g., Bauer-Ramazani, 2006) focused on online training of language teachers since it enables them to bolster their technological competence through an exposure to various online technologies. Due to its practicality and many other advantages such as enabling access to teachers from different places and providing opportunities for perennial and regular CALL training, it has an edge over the other approaches to CALL teacher education and stands as a viable way to train language teachers among a panoply of other options. These advantages have motivated researchers to ascertain the potential merits of the online CALL training for training language teachers.

Along with the preparation of language teachers for technology integration, there has been a focal need for CALL researchers to examine and elaborate on many interrelated factors affecting teachers' uptake of technology since "teacher technology use is multifaceted and complex behavior" (Russell, Bebell, O'Dwyer, & O'Connor 2003, p.307). Research on the factors playing a role in teachers' integration of technology has been an important arena that warranted significant attention in the literature and many factors such as lack of resources and materials (e.g., Egbert, Paulus, & Nakamichi, 2002), time pressure (e.g., Lam, 2000; Levy, 1997), prior technology education (e.g., Hong, 2009) have been revealed among many others in a wide body of research. There is no denying that technology integration can only be feasible when these factors are conducive to integration and

the success of CALL training is also heavily dependent on the requirements for technology integration to be met, which accentuates the importance of researching the factors having a role in teachers' technology infusion together with the exploration of the potentials of a CALL training for language teachers.

In addition to the above-mentioned areas of research interests, researchers have also been confronted by a substantive question of how much of the knowledge and skills gained in the CALL training can be transferred to classroom context and what factors affect the transfer. (e.g., Egbert et al., 2002). As an ultimate aim in technology teacher education, teachers are to be equipped with skills to apply experiences from a CALL training to their classes. Therefore, it is also worthwhile to scrutinize the transferability of the CALL training and the factors affecting it.

To address these multi-dimensional aspects of CALL teacher education, this study strives to first explore the factors affecting teachers' current use of technology in their classes, their perception of the online CALL training they received and the factors affecting the transferability of the training into classroom context.

1.2 Statement of the Problem

Teachers, as the pivotal actors in technology infusion, stand at center of any initiatives to integrate technology in the classroom context since the uptake of technology is predicated on "teachers' personal feelings, skills and attitudes to IT in general" (Mumtaz, 2000, p.337). Research on teacher cognition, therefore, is quite widespread in the field of teacher education (Borg, 2003) and also in CALL research due to the great role teachers play in technology integration (e.g., Cutrim Schmid, 2011; Whyte, 2011). It is important to explore, teachers' "voices, observations and concerns" (Egbert, Huff, Mcneil, Preuss, & Sellen, 2009, p.754) as a focal interest in CALL research. The findings from a vast number of studies (e.g., Egbert et al., 2002; Lam, 2000; Meskill, Mossop, DiAngelo & Pasquale (2002) which concentrate on the factors affecting technology integration also provide a convincing case that teacher perceptions are worthwhile and should be investigated in any attempts of technology integration.

Akin to the focus in studies related to technology integration, most of prior research has focused on teacher perceptions for the evaluation of the effectiveness of CALL training since "research into the perceived effectiveness of various CALL training methods and approaches is crucial to improving our understanding of how training may best be conducted" (Kessler, 2006, p. 35). Different approaches to CALL teacher education has been tested in a wealth of studies (Bauer-Ramazani, 2006; Chao, 2006; Desjardins & Peters, 2007; Peters, 2006) and teacher perceptions have been subject to a rich body of research in these studies in order to assess to what extent teachers benefited from the CALL course or training to be used in the design of future CALL courses or trainings (Hong, 2009). A host of studies showed that CALL training enables teachers to develop positive attitudes towards technology (e.g., Kamhi-Stein, 2000; vanOlphen, 2007) and gain self-confidence about incorporating technology in their classes (e.g., Hegelheimer, 2006; Hoven, 2007). Some of the studies (e.g., Egbert et al., 2002; Kılıçkaya, 2012; Kılıçkaya & Seferoğlu, 2013; Wong & Benson, 2006) investigated the extent to which coursework in CALL was transferred to actual teaching contexts but research did not prove to yield any conclusive findings which present any convincing evidence that a CALL training results in immediate technology use in language classroom.

Reviewing the literature, one can see that although the extant body of research has concentrated mainly on the investigation of the effectiveness of different approaches to CALL teacher education (e.g., breadth-first, depth-first, integrated, etc.) and varied "learning processes" (e.g., lectures, situated learning, self-directed learning, etc.) (Hubbard, 2008, p.182) for language teachers from their points of view, there has been no study which has explored the potentials of an online CALL training for in-service language teachers except for an online pre-service CALL course reported by Bauer-Ramazani (2006). Despite the whole gamut of advantages an online CALL training holds, there have been relatively few attempts to employ and research this approach in a CALL teacher training, which is a gap in the literature and deserves more attention in CALL research. To fill in this gap, this study, therefore, investigates teachers' perception of an online in-service CALL training alongside an

exploration of factors affecting their' use of technology and the transferability of the know-how gained in the training into classroom context since all of these information are required to understand the complexities of technology integration of language teachers, which is an ultimate aim in CALL teacher education (Hong, 2009) and thus need to be examined in concert.

To this end, the study investigated the following research questions:

1. To what extent does a group of Turkish EFL teachers use technology in their classes?

2. What factors affect their use of technology?

3. What are their perceptions of the online in-service CALL training?

4. What are the reasons for some teachers' leaving the online in-service CALL training?

5. To what extent do the teachers completing the training believe they can apply the tools they have learnt in the training to their own classrooms?

6. What factors affect these beliefs?

1.3 Significance of the study

The significance of the study for CALL research is mainly two-pronged. First of all, it will fill in the gap in the literature by presenting evidence on the efficacy of an online CALL training from the viewpoint of Turkish in-service English language teachers. It will yield worthwhile information on the potential benefits of the online delivery of a technology training for language teachers. Teacher perceptions vis-à-vis the online technology training, therefore, can inform future studies about the design elements of an online CALL training along with knowledge and skills required for being successful at such a training.

Secondly, this study is multi-faceted by virtue of its focus on many variables and factors playing a role in language teachers' technology integration. As the initial

step, it is of pivotal importance to uncover the factors affecting teachers' technology use in their current contexts since "technology integration is a complex process affected by many factors" (Karaca, 2011, p.iv) and these factors can impinge on teachers' uptake of technology. Investigating teacher perceptions of a CALL training is also necessary for getting informed about the pros and cons of the training and evaluating its success in terms of preparing teachers to use technology in their classes. Lastly, it is significant that the knowledge and skills gained in a CALL training transfer into classroom setting, which requires the exploration of factors affecting the transfer (Egbert et al., 2002). This study puts flesh on the factors affecting the technology integration process of language teachers through an elaborate exploration of various variables and factors.

1.4 Limitations of the study

This study comprised an online four week in-service CALL training for eight Turkish EFL teachers and examined the participating teachers' perceptions about the CALL training. To be more explicated in the methodology section, all of the teachers' age ranged between 37 and 50, which showed that the teachers were "digital immigrants" meeting technology rather late in their lives (Prensky, 2001). It is very likely that the findings can differ if the sample is drawn from novice teachers who are "digital natives". This is a limitation that should be taken into consideration in the evaluation of the findings.

This study drew on self-report data collected through interviews and reflection reports written in the blogs by the participating teachers. Due to the lack of observation of teachers' classroom practices, the researcher had to rely on information reported by teachers, which can be seen as another limitation of the study. This concern is also valid for the examination of the transferability of the CALL training to real language classroom. Although the transferability of the CALL training is the ultimate aim in CALL teacher education and this study investigated the transferability of the CALL training from the viewpoint of the teachers, the study

does not present any concrete evidence of the transferability of the training since no classroom observation is included in the data collection.

In addition to these, other limitations can be the duration of the training and the number of the participating teachers receiving the training. To remedy this problem, the duration can be prolonged with more teachers taking the training.

CHAPTER 2

LITERATURE REVIEW

This chapter presents a comprehensive review of the literature concerning the factors affecting teachers' technology use, technology integration initiatives in the Turkish context and introduces the Fatih project with a synthesis of studies conducted. Later, a compilation of the studies on CALL teacher education is provided and followed by the success factors in the online environments.

2.1 Factors affecting teachers' technology use

The integration of technology has become at length a common practice in language classes since CALL tools provide great potential for foreign language learning and teaching. With the advancements in educational technology, it has been an indispensable need for language teachers to integrate technology into their classes as an effective means of improving instruction (Bush, 1997). To explicate the merits of CALL technologies, Egbert et al. (2002) stated the following:

> When integrated appropriately, CALL technologies can support experiential learning and practice in a variety of modes, provide effective feedback to learners, enable pair and group work, promote exploratory and global learning, enhance student achievement, provide access to authentic materials, facilitate greater interaction, individualize instruction, allow independence from a single source of information, and motivate learners. (p.109).

In relation to the ultimate stage of CALL integration in language classroom, Bax (2003) states that the end point of CALL integration should be "normalisation in which the technology is invisible and truly integrated" (p.13). At this stage, technology is part of teachers' everyday practices like pen and pencil and becomes unnoticed. As stated by Bax, however, normalisation has not been achieved yet and CALL still stands as a 'separate concept'.

As far as the role teachers play in the success of CALL integration is concerned, Egbert et al. (2009) posit that the success of CALL implementation depends heavily on the teachers among panoply of other stakeholders and interfering factors. According to Saleh & Pretorius (2006), "language teachers need to be computer literate, or e- literate, and should learn to make the most of Web tools available and apply this knowledge to their educational contexts" (p. 119). In addition to computer literacy, teachers' careful and structured monitoring of technology is the backbone of a seamless technology integration (Weasenforth, Biesenbach-Lucas, & Meloni, 2002). Teachers, on the other hand, are confronted with a wide array of difficulties and challenges while using technology in their classes (Erben, Ban, Jin, Summers, & Eisenhower, 2008).

The literature abounds with factors affecting teachers' infusion of technology in their classrooms. These factors can be enumerated as *time pressure* (Lam, 2000; Levy, 1997; Meskill, Anthony, Hilliker-VanStrander, Tseng, & You, 2006; Reed Anderson, Ervin, & Oughton, 1995; Strudler,Quinn, McKinney, & Jones, 1995), *paucity of resources and materials* (Adelman et al.,2002; Cuban, 2001; Egbert et al., 2002; Hadley & Sheingold, 1993; Rosen & Weil, 1995;), *training and technical support* (Bradley & Russell, 1997; Lam, 2000; Langone, Wissick, Langone, & Ross, 1998; Levy, 1997; NCES, 2000; Penuel, 2006; Russell & Bradley, 1997), *insufficient technology standarts or curricula* (Langone et al., 1998), *teacher attitudes towards technology and confidence in its use* (Karakaya, 2010; Lam, 2000; Yuen & Ma, 2002; Zhao & Frank, 2003), *prior technology education* (Egbert et al, 2002; Hernández-Ramos, 2005; Hong 2009, 2010), *prior experience with technology* (Reed et al., 1995), *technology use in schools or school climate* (Hadley & Sheingold, 1993; Hong 2009, 2010; Rosen & Weil, 1995; Winnans & Brown, 1992), *teacher belief in the benefits of technology for teaching* (Ertmer,1999; Lam, 2000; Penuel, 2006), *peer support* (Garet, Porter, Desimone, Birman, & Yoon,2001).

Mumtaz (2000), in his extensive literature review of studies investigating the factors affecting technology integration, lists those factors as the following:

- lack of teaching experience with ICT;
- lack of on-site support for teachers using technology;
- lack of help supervising children when using computers;
- lack of ICT specialist teachers to teach students computer skills;
- lack of computer availability;
- lack of time required to successfully integrate technology into the curriculum
- lack of financial support (p.320).

Among the above-mentioned factors which affect technology integration unfavorably, Mumtaz (2000) asserts that teachers' beliefs about teaching via ICT serve as the foundation for technology integration as more critical than resources, technical support or any other factor. Practicality is also a criteria for technology use since "teachers use computers in ways that address their most direct needs, bring them maximal benefits, do not demand excessive time to learn, and do not require them to reorganize their current teaching practices" (Zhao & Frank, 2003, p.821). Hernández-Ramos (2005) contended that constructivist beliefs about teaching promoted more frequent use of technology.

Pre-service technology education or prior coursework in technology has been cited as one of the determinants of technology integration (Hernández-Ramos, 2005; Reed et al., 1995). Moore, Morales and Carel (1998) contend that pre-service and in-service professional development programs should encompass courses in instructional technology, which showcases effective use of technology. This need was also voiced by Russell et al. (2003), who accentuated the importance of displaying models of technology integration rather than sole introduction of specific technologies in pre-service training.

As another facet of technology integration, in-service training also plays a pivotal role in building teachers' confidence in using technology. NCES (2000) showed that those teachers spending more time in professional development activities in educational technology felt themselves more prepared for technology integration

compared to others. Technology training was also found to be more beneficial when the links between the curriculum, content the teachers teach and technology are displayed lucidly to the teachers and this link is meaningful to them (Kanaya, Light, & Culp, 2005).

Scheffler and Logan (1999) assert that for effective technology integration in schools, it is of great importance to define computer competences needed by teachers and these competences should be subjected to constant revision and update as new technologies emerge. These competences, however, should be informed by the context in which new technology is going to be used. It is important "to focus more attention on context and pedagogy for those teachers who initially appear to be technologically adept, but lack the ability to effectively integrate technology in a contextualized manner" (Kessler & Plakans, 2008, p. 269).

The take-up of technology by teachers is also closely tied to the resources and materials available. Limited resources and materials render technology integration unfeasible for teachers whilst the availability of software is an encouraging factor for teachers for using technology (Sepehr & Harris, 1995). Norris, Sullivan, Poirot, and Soloway (2003) notes that "the magnitude of the relationship between technology access and technology use is so strong as to support meaningful prediction of teachers' technology use based on particular patterns of technology access both in individual classrooms and in shared computer labs" (p.25). As pointed out by Pelgrum (2001), who collected data from a myriad of teachers in 26 different countries, the meagre number of computers at schools is a big obstacle to technology integration. The provision of enough technological resources and facilities, however, is not a panacea since successful implementation of technology is more vital than the provision of resources (Penuel, 2006). Technologies are mostly "oversold and underused" (Cuban, 2001, p.179) and their effect on learning seems to be meagre in these situations.

Apart from the availability of technological resources, Stager (1995) emphasized that successful integration of technology is within the realms of possibility if some

changes are made outright in the school context with the support of trainers helping the teachers integrate technology in their classes by observing and modeling, which was also confirmed in ensuing research (Dwyer & Sandholtz, 1991; Sandholtz & Dwyer, 1997).The need to interact, share experiences and collaborate with colleagues during technology training has been voiced by teachers (Yunus, 2007).

As another significant dimension, the inclusion of all stakeholders in the process of decision-making and implementation is of pivotal importance in technology integration. Weikart and Marrapodi (1999), for instance, examined 25 schools in the US where computers were widely available to teachers and students and there was an effectual implementation of technology by virtue of 'entrepreneurial, risk taking teachers', 'deeply involved principals' and 'committed stakeholders' (i.e. parents, custodians, external organizations) (p. 52-53). They posited that for a successful implementation of technology, it was necessary to remove the regulatory constraints that beset the teachers in choosing and buying the technological tool they need, building the technical infrastructure, giving teachers adequate training and support, funding site-based leaders to give on-site support to teachers and developing school based technology plans.

Along the same lines, in his review of studies on one-to-one initiatives in the integration of laptop computers with wireless connectivity in K-12 settings in the US, Penuel (2006) concluded that research findings on the initiatives of technology implementation should be transmitted to policy makers and program developers, who should use this information in designing 'professional development opportunities for teachers' and providing 'external funding' and 'technical support' (p.341). Active sharing and participation in professional development activities with colleagues were also found to be facilitative for technology integration. (Garet et al., 2001)

Some studies examined the effect of teaching experience on the integration of technology. As corroborated by a few number of studies, veteran teachers used technology more compared to less experienced teachers (Moore et al., 1998; Russell et al., 2003). Reporting lower level of comfort with technology than less experienced

teachers albeit, seasoned teachers used technology more for instructional purposes in their classes than novices who used technology more for 'preparation' and 'communication' (Russell et al., 2003, p. 297).

Factors affecting technology use has also been explored in various ESL and EFL contexts. (i.e. Egbert et al., 2002; Hong, 2009, 2010; Lam, 2000; Meskill et al., 2006; Sumi, 2011; Yunus, 2007). To illustrate, Moore et al., (1998) showed that EFL teachers' use of technology was minimal for the purpose of teaching culture, which was deemed to be a concomitant of the lack of facilities or teaching material. Lack of time to learn about technology and also use it in class and lack of resources were the main impediments to technology integration for ESL teachers in Meskill et al. (2006).

Language teachers' stances on the importance of technology use in language teaching play a central role in technology integration. According to Lam (2010), taking decisions about technology usage, teachers are greatly influenced by their personal inclinations towards technology suggesting that one of the first attempts to enable teachers to infuse technology is to persuade them of the importance of technology and see its potential in learning and teaching language.

Similarly, Meskill et al. (2006) had a study which investigated whether there was an increase in ESL teachers' use of technology as an outgrowth of despite the betterment of technology access in US schools. As revealed by a New York statewide survey conducted in 1997 and 2003, during which technology availability increased to a great extent, teachers did not increase their technology use in their classes. These findings showed to the researchers that for effective technology integration, teachers, as the 'insiders' should be given priority in decision-making processes through a bottom-up approach since teachers did not 'revolutionize their teaching' after such high-stakes investments (p.448).

Some researchers stressed the importance of contextualization for CALL implementation. Sumi (2011), for example, suggested an "ecological perspective" in

which the whole context of language learning and teaching should be explored deeply along with the many interrelated factors for the implementation of new technology. This ecological view was also echoed by Chambers and Bax (2003) and shown as a way to normalisation. As revealed by Kessler and Plakans (2008), "contextually confident" ESL teachers integrated technology more successfully while using audio and video in their classes compared to "highly" and "less confident" teachers showing that confidence with CALL does not guarantee effective integration of CALL but the know-how to apply technology in appropriate pedagogical context is paramount. (p.269)

In relation to the CALL focus in teacher education programs, Kessler (2007) argued that teacher education programs were devoid of concentration on CALL. Kessler (2007), in his survey completed by 108 graduates of Teachers of English to Speakers of Other Languages (TESOL) master's degree program found out that these teachers who were not satisfied with the formal CALL training they received were not much confident about "creating CALL based materials" and integrating technology into their classes.

As regards ESL teachers' use of ICT, Yunus' (2007) study conducted in Malaysian context revealed that ICT was not used widely for the purposes of language teaching and learning by these teachers. Although the teachers perceived ICT as a useful tool in language teaching and had a positive attitude towards its use in language classes, they brought to light some challenges that impinged on its use such as lack of access to computers, low quality hardware, lack of technical support and training. These factors were also reiterated by Kessler and Plakans (2008), who found out that "access to technology", "continued practice", and "technical support" helped ESL teachers build confidence in using analog and digital audio and video in their classes (p. 276). In a similar vein, access to computers in schools was a factor that tempered Taiwanese EFL teachers' level of computer phobia and boosted their computer self-efficacy (Chen, 2012).

In a similar vein, Lam (2000) interviewed 10 graduate students working as second language teachers and scrutinized the reasons for these teachers' use and non-use of technology in their classes. His study showed that teacher conviction about the benefits of technology for language teaching was of paramount importance for teachers as a factor affecting their technology use. The motives to use technology were recounted as "helping their students learn the target language better, such as offering a variety of input and motivating students", while the reasons of not using technology were predicated on " a lack of confidence in the advantages of computer-assisted instruction for students" (p.410). Lack of resources, professional support and confidence in computer skills were, by and large, hindrances to their use of technology in their classes.

In Egbert et al.'s (2002) study, which investigated the use of CALL in language classes by L2 teachers taking a graduate CALL course, " lack of time, administrative or curricular restrictions, and lack of resources" were recounted to be the focal reasons of not using CALL activities (p. 119).Lack of competence in technology was not given as a reason for not using technology in class by these teachers showing that technology training helps build confidence in using technology at least to a certain extent.

Hong (2009) investigated the effect of prior technology education and the role of school climate on in-service teachers' use of computers in their classrooms. Through a survey questionnaire applied to 200 secondary school teachers working at state schools, his study revealed that prior technology education contributed significantly to L2 teachers' use of technology in the classroom and in the schools where there were more teachers who got technology education in pre-service or in-service years, technology use was more abundant and ample compared to the schools with few teachers receiving technology education beforehand. His statistical analysis also specified 150 hours of technological education as a requisite for using technology frequently (i.e., at least once a week) in the classroom. The positive relationship

between prior technology education and technology use in the classroom was strengthened by the school climate.

Despite the magnitude of technology coursework in gearing L2 teachers up for using technology in their classes, some studies provided evidence that the type of CALL education also matters as a factor affecting technology infusion (i.e. single CALL course, project-based, situated, mentoring, etc.) (e.g., Egbert et al, 2002; Grau, 1996; Hargrave & Hsu, 2000; Keirns, 1992; Parr, 1999; Wentworth, 1996). In these studies, different 'approaches' and 'processes' to CALL teacher education have been tested out (Hubbard, 2008) and the potentials of these for the preparation of teachers have been explored. Although they did not present any convincing evidence on the superiority of one approach or process to another, they helped to provide various choices for CALL teacher education.

Hong (2009, 2010) reviewing the literature on technology integration as a concomitant of CALL technology education, came up with a spherical model of L2 teachers' integration of technology into the language classroom. This model in which CALL teacher education, teachers' individual factors and contextual factors stood as three orbits was centered on CALL teacher education as the most substantive element in technology integration as espoused by previous research. Individual factors were proximal to CALL teacher education since individual factors (e.g., "L2 teachers' general computer literacy skills or teachers' attitude toward and confidence in computer technology")have been found to be in sync with and be affected by CALL teacher education more whilst contextual factors (i.e. "lack of computers in and little support from the school where L2 teachers work") were in the outer circle since they were "relatively independent of CALL teacher education" (Hong, 2009, p. 29). The spherical model, notwithstanding its limitation to provide an indisputable answer to the question of whether CALL technology education calls forth the integration of technology in L2 classes, can be conceived as beneficial to showcase the multivariate aspect of CALL teacher education.

2.2 Technology integration in the Turkish context

The integration of educational technologies into schools is seen as a pivotal need by Ministry of National Education (MoNE) since the second quarter of 1990s (Akkoyunlu, 2009). Due to the high value for technology integration, there have been several attempts by MoNE to implement ICT in Turkish educational settings (Özdemir & Kılıç, 2007). To achieve success in these attempts, it is important that these attempts are informed by an extensive body of research, which reveals the barriers to technology integration as an initial step to integrate ICT in Turkish educational context (Toprakci, 2006). To this end, there has been a wealth of studies examining factors affecting ICT implementation at schools in Turkey.

The review of studies conducted in the Turkish setting substantiated the factors found to affect technology implementation in international studies. In a survey study, which was applied to a large number of primary and secondary school teachers and principals in rural and urban areas, Toprakci (2006) enumerated the obstacles to technology implementation as:

> budget limitations; scarcity of technical support resources of the school staff to be trained in ICT, the limited number of computers, outdateness/slowness of the system related to ICT, limited numbers of educational software, resistance in being open to changes, interest and drive of the city directorships of the MoNE, educational expertise of the teachers and principals and the defiance of being open to changes, interest and motivation of both teachers and principals" with a descending order of importance (p.9).

According to Toprakci (2006), without a consideration of these impediments, the attempts of MONE to integrate technology will not yield positive outcomes.

In respect of the impediments in the way of successful technology integration, Çağıltay, Çakıroğlu, Çağıltay and Çakıroğlu (2001) found out that the paucity of computers in classes, the lack of in-service training and the incompatibility between

curriculum and the necessary conditions for technology use resulted in teacher anxiety about using technology in their classes.

Gülbahar (2007) scrutinized the issues related to the use of ICT in a private K-12 school in Turkey. Based on the data collected from teachers, administrative staff and students in this school, she suggested using up-to-date resources, the provision of equity of access to resources by teachers, administrators and students, the provision of support services and reward systems and the integration of technology into the curriculum during technology implementation.

In the same vein, Somyürek, Atasoy and Özdemir (2009) scrutinized the problems impeding the effective use of interactive whiteboards (IWB) as one of the recently used technological tools. They concluded that "when the needs for in-service training, digital education materials, support, maintenance, and administration are not addressed, educational ICT is unlikely to deliver the expected results" (p.368) as similar to previous ICT implementation attempts. As voiced by teachers in Somyürek et al. (2009), the quality and quantity of digital educational materials were insufficient, which prevented them from using interactive white boards effectively in their classes. These teachers reported to supply these materials themselves due to the lack of support by MoNE or their school.

Goktaş, Yildirim & Yildirim' (2009) study, as similar to previous studies, revealed that lack of in-service training and resources were the main impediments to technology integration, which could be rendered possible through the preparation of a technology plan across STE.

With respect to the factors affecting elementary school teachers' technology integration, Karaca's (2011) study revealed that technological competence was the foremost factor determining their technology use among other factors such as "principal support, computer use in years, colleague support and teachers' attitude and belief towards using technology" (p.v).

Akcaoğlu (2008) stated that teachers are confronted with insufficient technological infrastructure which suggests that "a vision towards technology integration lacks (p.v)" in Turkey. Similarly, Bayram and Seels (1997) pinpointed the economic constraints as the main hindrance to technology implementation in Turkey. As noted by Bayram and Seels, private schools were more technologically equipped than state schools, which was reaffirmed by Top (2007) and Kılıçkaya (2012). By virtue of this advantage, private school teachers utilized technology more effectively compared to those teachers at state schools. Top (2007) also reiterated that private school English teachers used technology in a wider range of activities in "planning, instruction, evaluation and assessment and professional development than the other English teachers" (p.v). These teachers perceived themselves to have more knowledge of technology than teachers at state school. Akcaoğlu (2008), on the other hand, showed that even private schools did not have adequate computer infrastructure, which prevented teachers of English from using computers for instructional purposes.

Gulbahar & Guven (2008) noted that "teachers must be part of the decision making process with respect to the implementations of ICT innovations in schools, so that they may commit to the innovation with conviction." (p. 47). Teachers' attitude towards technology and their technological competence, therefore, should stand at the center of any attempts of ICT implementation. The studies examining teacher attitude showed that teachers had positive attitudes toward technology. A sample of teachers taken from three different cities in Turkey believed in the merits of using computers for teaching and learning (Çağıltay, Çakıroğlu et al., 2001). In a similar vein, social studies teachers in primary schools had positive attitudes towards the use of ICT in their classes (Gulbahar & Guven, 2008) although they faced many barriers to technology integration. Despite this positive attitude, teachers' use of technology was found to be quite scarce in classes. Seferoğlu, Akbıyık, & Bulut (2008), for instance, indicated that a considerable amount of elementary school teachers reported not to use any program in their classes. The computer use of the other elementary school teachers was also limited to the use of word processors and presentation programs. The teachers in Çağıltay, Çakıroğlu et al. (2001) used computers mainly

for preparing exam questions, grading and administrative issues rather than for instructional purposes. These findings accentuated the importance of in-service training for teachers to integrate technology into their classes, as also suggested by Gülbahar (2007) and Seferoğlu et al. (2008). The in-service training should focus both on the technical and pedagogical aspect (Somyürek et al., 2009), as revealed by teachers who reported not to use interactive white boards in their classes due to a dearth of technical and pedagogical training. In addition to in-service training, reward systems should be developed at schools in order to encourage teachers to utilize technology in their classes (Gülbahar, 2007).

Top (2007) contends that for an effective technology integration, a shared technology integration vision should be adopted by all parties, who should be involved in the whole process of implementation and take responsibilities. This shared vision should also be put into practice by a "special group consisting of teachers, consultants, educational technologists and field experts", (Gülbahar 2007, p. 954) who should work on appropriate strategies and constantly revise the curriculum during the technology integration process. As suggested by Gülbahar (2007) and Somyürek et al. (2009), a technology plan can be developed at schools during the process of technology integration and continuous amendments to this plan should be made for effective implementation of technology. (Gülbahar, 2007).

The role of administrators were found to be significant for motivating and enabling teachers to integrate technology into their classes. Teachers in Somyürek et al. (2009) complained mostly about the lack of technology support and maintenance which impeded their technology use in their classes. Top (2007) found out that the administrators generally had positive attitudes towards teachers' use of technological resources in schools. The administrative support, however, was at large limited to verbal approval and encouragement and was not bolstered with "feedback or solutions to problems arising in the processes of extensive IWB use" (Somyürek et al., 2009, p.373).

Several studies (Akcaoğlu, 2008; Goktaş et al., 2009; Seferoğlu et al., 2008; Semiz, 2011) showed that there is a need for pre-service teacher education programs to upskill teachers with the knowledge and skills to integrate technology into classroom setting, which affects their future technology use. As noted by Akcaoğlu (2008), pre-service teacher education was not enough to gear language teachers up for using technology effectively in their classes. Resonating with this finding, Seferoğlu et al. (2008) showed that elementary school pre-service teachers relied on trial and error to improve their technological competence. They, therefore, supported the significance of including courses in educational technology showcasing effective use of technology in pre-service teacher education programs. Şahin (2003) showed that student teachers taking a course in instructional technology and materials development reported to benefit from the teaching and learning process carried out via constructivist principles. The faculty members in Goktas et al. (2009) stated that teacher educators should be role models for pre-service teachers by using ICT effectively in their classes. Pre-service teachers enrolled in physical education programs across Turkey, however, reported that faculty members were not good models in integrating technology (Semiz, 2011), which emphasized the need for professional development activities for these faculty members.

Atal and Usluel (2011) pointed out that the technologies elementary school students used outside the classroom differed significantly from the technologies their teachers used in classroom setting. These students who mostly used social media outside the class (e.g., Facebook, MSN, Youtube) expected their teachers to use these technologies inside the classroom, which signaled the need for teachers to bridge the gap between their students' preferences of technologies and the technologies they opt for utilizing their classrooms.

Appertaining to the teachers' attitudes towards online resources, Arkın (2003) examined the factors affecting Turkish L2 English teachers' use of an online supplementary resource for vocabulary teaching and demonstrated that the provision of in-service training served as the foundation for technology use by these teachers

since it changed teachers' attitudes towards technology positively and encouraged them to use it in their classes.

As regards the impact of CALL implementation projects on teachers, Timuçin (2006) took part in a CALL implementation project in Turkish EFL university setting. In this project, teachers benefited most from preparing support materials for the software to be used and the discussions and meetings with colleagues and administrators among many other activities. This finding showed that teachers should be given every chance to benefit from what they already know and use this knowledge in the process of technology integration. The importance of 'building a strong teacher community' was also substantiated as a necessity for effective CALL implementation (p. 266).

Some studies into CALL proposed a technology integration guideline to contribute to successful technology integration. For instance, Top (2007) had a qualitative study with 17 high school English teachers and 17 principals using observations, document analysis and interviews. Based on his investigation of these schools and review of literature, he proposed the following technology integration guideline as shown in Figure 1 below.

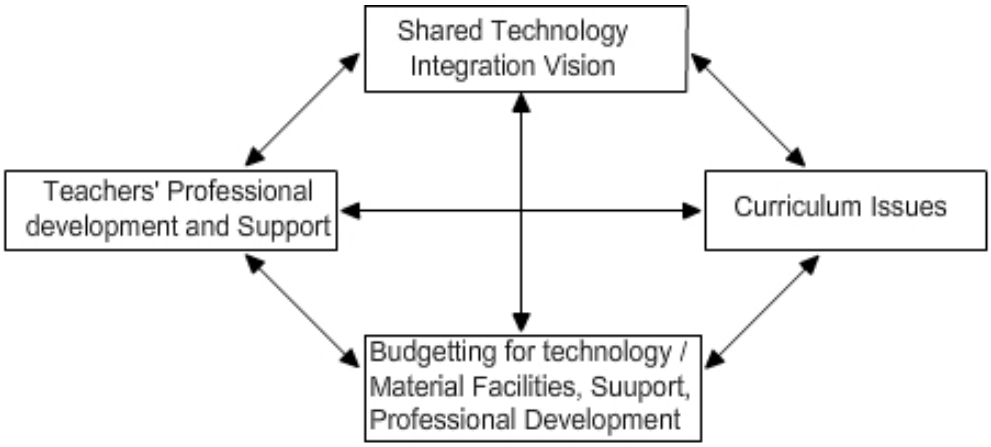

Figure 1. Main Components of Technology Integration Guidelines. Reprinted from Top (2007, p.181)

According to this guideline, which summarizes the main factors affecting technology use, a shared technology integration vision should be coupled with teachers' professional development and support, curriculum adjustments, budgeting for the provision of technology, resources, support and in-service training. In addition, curriculum should also be tailored to enable technology integration in such a way that curriculum is "learner-centered" and in synch with "contemporary FLE theories and approaches".

Similarly, Akcaoğlu (2008) had a survey questionnaire and interview with pre-service and in-service English teachers at private schools. His study revealed that although teachers reported high levels of technological competence, teachers' use of technology was quite limited in language classes. Technology was used mainly as teacher tools rather than student tools.

As similar to this study, Karakaya (2010) scrutinized Turkish L2 English teachers' attitudes towards computer technology and the extent to which they utilized technology for instructional purposes. He collected extensive data from English teachers at state schools across Turkey via a questionnaire and interview. The findings revealed that notwithstanding having positive attitudes towards computers, English teachers stated that they could not use them effectively for teaching and learning purposes. Based on these findings, he concluded that there is a vital need for in-service training on effective integration of technology for these teachers. The necessity of including courses in educational technology in pre-service ELT teacher education programs was also highlighted in this study.

Kılıçkaya (2012) analyzed the factors affecting Turkish L2 English teachers' infusion of technology ensuing a CALL course taken during pre-service teacher education program. He ascertained that the foremost factors inhibiting the use of CALL were "the school environment, curriculum and the national exams". As different from the findings of a wide variety of studies, the technological infrastructure was not a factor affecting CALL use since all of the classes were equipped with at least one computer. As stated by L2 English teachers at state

schools, the schools administrators did not encourage them to use CALL in their classes and provide technical support. For those teachers working at private schools, the national exam which did not include English as subject and distracted learners' attention from English lessons along with time constraints were factors impeding CALL integration.

An extant body of research has shown that technology integration is a multi-faceted phenomenon, which stands at the junction of many interfering variables. It is, therefore, of utmost importance to benefit from the findings of a multitude of studies and attempts on technology implementation to inform future research and investments to be made in Turkish educational system. This need was also echoed by Özdemir (2010), who referred to "loss of organizational memory" and stated that "MoNE could not capture, organize, disseminate, or reuse the knowledge and experiences gained during the project life cycles –in short, it could not keep its organizational memory which will be useful to guide the managers of future projects.

2.3 Fatih project

Fatih project (Movement of Enhancing Opportunities and Improving Technology Initiative) is one of the most prominent and recent investments made by MoNE, which aims to equip schools with the cutting-edge technological tools as a momentous effort of technology integration into Turkish educational context (Akcaoğlu, Gumuş, Bellibas, & Boyer, 2014). The project aims to provide equal opportunities in education and enhance the technological infrastructure at schools by integrating ICT effectively into learning and teaching processes throughout the country (Fatih project, 2014). The know-how of ICT is one of the fundamental goals of Turkish education system and to this end, it is planned that the technical infrastructure is improved at schools, students and teachers are upskilled to use ICT successfully and ICT-supported curriculum is developed (Bilici, Akdur, Yildizbasi, Gunday, & Cicek, 2011). The project has five main components. These are:

1. The provision of hardware and software infrastructure
2. The provision and management of e-content

3. Effective use of Information Technology (IT) in curriculum
4. In-service training of teachers
5. Informed, safe, manageable and measurable use of IT

(Fatih Project, 2014)

Bilici et al. (2011) explicated the aims of these components as follows. As elaborated by Bilici et al, the aim of the first component is to provide 40.000 schools and 620.000 classes with IT equipments. The aim of the second component is to develop quality content to be used during teaching and learning processes. The aim of the third component is to incorporate IT effectively into learning objectives for every subject in curriculum. The aim of the in-service training given to teachers is to upskill them to develop e-content and use IT in their classes. The aim of the fifth component is to promote the use of IT at primary and secondary schools during teaching processes.

Within the scope of the project, every classroom at pre-school, primary and secondary school is projected to be equipped with an interactive white board (IWB) and internet connection in addition to tablet PCs to be provided to teachers and students (Fatih Project, 2014). Multi-purpose copier, document camera and microscope camera are also encompassed in Fatih project tools (Yeni-Palabıyık, 2013). The project is estimated to be completed in five years starting from secondary schools and going on with primary school and pre-school respectively. In the meantime, it is planned that hardware and software infrastructure is set up, e-content is developed, teacher guide books are updated, in-service training seminars are arranged and the need for informed, safe, manageable and measurable use of IT and internet is met (Fatih Project, 2014).

E-content consists of learning objects supported by multimedia (i.e. audio, video, animation, presentation, photos and pictures) and interactive e-books (Alkan, Bilici, Akdur, Temizhan, & Çiçek, 2011), which will be accessible both online and offline through web- based environments (Yeni-Palabıyık, 2013). E-content is produced in two ways: teacher prepared e-content and the e-content provided by other producers.

Teachers will be given both face to face and distance in-service training in order to develop skills to use the hardware infrastructure, e-content and curriculum updated in sync with IT. To ensure the informed, safe, manageable and measurable use of IT along with conscious and safe use of internet, necessary hardware and software infrastructure will be set up (Alkan et al., 2011).

There is no denying that Fatih project can be considered as an epoch making reform in Turkish education system due to its innovative nature. Provided the project reaches its goals, it can contribute significantly to national education (Akıncı, Kurtoğlu, & Seferoğlu, 2012).

However, as indicated by Akıncı et al. (2012), the project already has some limitations. The stakeholders, who are important for the success of the project were not included in the planning and decision making stages and this lack of cooperation among parties poses a big threat to the take-up and effective use of new technology by these stakeholders.

2.4 Studies on Fatih project

A vast majority of studies on Fatih project were perception and attitude – oriented (Dinçer, Şenkal, & Sezgin, 2013). These studies can be grouped as those investigating student perceptions of Fatih project tools (Dündar & Akçayır, 2014; Kırali, 2013; Pamuk, Çakır, Ergun, Yılmaz, & Ayas, 2013; Salman, 2013; Sayır, 2014; Şad & Özhan, 2012), teacher perceptions (Akcaoğlu et al., 2014; Banoğlu, Madenoğlu, Uysal, & Dede, 2014; Çetinkaya & Keser, 2014; Çiftçi, Taşkaya, & Alemdar, 2013; Daşdemir, Cengiz, Uzoğlu, & Bozdoğan, 2012; Gürol, Donmuş, & Arslan, 2012; Koçak, 2013; Kurt, Kuzu, Dursun, Güllüpınar, & Gültekin, 2013; Pamuk et al., 2013; Özdemir & Bozdoğan, 2013; Salman, 2013; Sayır, 2014; Türel, 2012), administrator perceptions (Dursun, Kuzu, Kurt, Güllüpınar, & Gültekin, 2013; Karataş & Sözcü, 2013), parent perceptions (Güllüpınar, Kuzu, Dursun, Kurt, & Gültekin, 2013), pre-service teacher perceptions (Aksu, 2014; Çuhadar, 2014; Ocak, Gökçearslan, & Solmaz, 2014; Uzoglu & Bozdogan, 2012), self-efficacy beliefs

(Celik, 2012; Kocaoğlu, 2013; Yeni-Palabıyık, 2013) of teachers about integrating project tools.

An examination of the above-mentioned studies showed that most of them were conducted at pilot schools which Fatih project tools were equipped with. Although Dursun et al. (2013) posited that findings from different studies on Fatih project cannot be generalized to all pilot schools since the implementation of the project changes drastically from school to school and from city to city, the above-mentioned studies come up with certain themes and conclusions about the strengths and limitation of the project as discussed below.

Student attitudes to Fatih project tools were found to be positive (Dündar & Akçayır, 2014; Kırali, 2013; Koçak, 2013; Pamuk et al., 2013; Salman, 2013; Sayır, 2014; Şad & Özhan, 2012). Kırali (2013) investigated student perceptions about the implementation of tablet PCs at a high school in İstanbul and found out that the students had positive attitudes towards the use of these tools for instruction. Dündar & Akçayır (2014) showed that students found tablet PCs useful. Students at eight state schools in Muş stated to benefit from IWBs in EFL instruction, especially in developing their speaking skill (Sayır, 2014). Project tools tended to increase their motivation and enabled teachers to teach more effectively (Salman, 2013; Sayır, 2014). Students, however, had some concerns regarding the technical problems (Koçak, 2013; Sayır, 2014) and internet constraints (Dündar & Akçayır, 2014) they were confronted with in their use of IWB and tablet PCs. They expected the filtration of internet to be removed and have access to external course materials in addition to those materials installed on tablet PCs by MoNE. They also indicated the need of the function to transfer data between computers and tablets to use them more effectively (Dündar & Akçayır, 2014).

Several research studies showed that similar to student attitudes, teacher attitudes were also positive towards Fatih project tools (Akcaoğlu et al., 2014; Çiftçi et al., 2013; Dündar & Akçayır, 2014; Koçak, 2013; Sayır, 2014). A great number of teachers indicated that project tools made the lessons more visualized and thus more

attractive for the students (Akcaoğlu et al., 2014; Banoğlu et al., 2014; Çiftçi et al., 2013; Daşdemir et al., 2012; Pamuk et al.; 2013; Şad & Özhan, 2012; Yeni-Palabıyık, 2013). Although teachers acknowledged the merits of tablet PCs (Dündar & Akçayır, 2014), they had some concerns regarding their functions and usability. Akcaoğlu et al. (2014) showed that teachers were not satisfied with the limited "functionality" of tablet PCs since they were not connected to the internet and mainly used for the purposes of reading pre-loaded e- books and taking notes. The "lack of connectivity" (p.9) between tablets and IWBs and the lack of connectivity between teacher and students tablets were among other restrictions, which prevented teachers from using these tools interactively. Due to the lack of control function in tablet PCs, teachers could not monitor students who used these tools for extracurricular activities (e.g., playing games, listening to music, etc.) during class time (Çetinkaya & Keser, 2014). The insufficiency of e-content and the lack of materials to be used in tablet PCs along with the difficulty of developing materials in these tools were other major handicaps (Çetinkaya & Keser, 2014; Dursun et al., 2013). To this end, the need for additional materials to be used in tablet PCs was pinpointed by teachers (Dündar & Akçayır, 2014). Çetinkaya and Keser (2014) found that tablet PCs did not work properly and these technical problems could not be handled without technical support. In addition, the software was insufficient and there was a need for other software to be uploaded on tablet PCs. Lack of access permission to some websites, internet security (Çetinkaya & Keser, 2014) and the preservation of tablet PCs (e.g., breakdown, loss of PCs, etc.) (Çiftçi et al., 2013) were included in teachers' other concerns related to tablet PCs. Pamuk et al. (2013) showed that several teachers did not let their students use tablet PCs in class time to prevent them from being distracted (Pamuk et al., 2013) akin to some teachers who were worried that students would visit websites unrelated to course content while they are lecturing (Özdemir & Bozdoğan, 2013). Taking all these factors into account, Pamuk et al. (2013) also ascertained that due to the aforementioned reasons, teachers' use of tablet PCs was generally very limited, not to mention some teachers who never used these tools in their teaching.

Studies on teacher perceptions regarding IWBs showed that teachers encountered a multitude of problems in their use of IWBs and could not benefit from them to their full potential.

Pamuk et al. (2013) found that although teachers reported to use IWB frequently in class, observation data revealed that teachers' use was very scarce and limited to demonstrating the presentations they prepared. Similar to tablet PCs, lack of e-content and e-materials, lack of interactivity between tablet and IWB, limited or lack of access to internet at school and lack of internet access outside school and lack of antivirus programs were the major problems concerning the use of IWBs (Akcaoğlu, 2014; Banoğlu et al., 2014; Pamuk et al., 2013; Yeni-Palabıyık, 2013). Teachers also had difficulty with finding materials to use with IWBs (Banoğlu et al., 2014). They could not use self-prepared materials in class but were obliged to use the e-content provided on the Ministry of Education portal (Akcaoğlu et al., 2014).The other problems were pertinent to the limitations on the use of hardware and software and concomitant technical problems (Akcaoğlu et al., 2014; Çetinkaya & Keser, 2014; Gürol et al., 2012; Koçak, 2013; Sayır, 2014; Türel, 2012).

Studies showed that IWBs were more widely used by teachers than tablet PCs (Kurt et al., 2013; Pamuk et al., 2013) despite being used in uni-directional and teacher-centered way (Türel, 2012). Şad and Özhan (2012) indicated that although students in his study reported that IWBs enhanced their learning, most of the factors indicated by students as enhancing their learning were also available in the use of computer, projector and internet technologies, which showed that IWBs' versatile features could not be used properly. Resonating with this finding, Pamuk et al. (2013) and Kurt et al. (2013) also showed that IWBs were used mainly for demonstrating presentations prepared by teachers or internet based materials, which can also be done via computer, projector and internet technologies.

Several researchers emphasized the pivotal role teachers played for the success of Fatih project (Akıncı et al., 2012; Kayaduman, Sırakaya, & Seferoğlu, 2011). Giving a citation from teacher competencies promulgated by MoNE in 2006, Kayaduman et

al. (2011) indicated that it is of utmost importance to examine the extent to which these competencies related to ICT use are possessed by teachers in order to achieve success in Fatih project. IT guide teachers at pilot schools in Eskişehir indicated that teachers had inadequate competency levels of technology usage (Güngör & Yıldırım, 2014). To upskill teachers, perpetual in-service training stands as a sine qua non as voiced by several researchers (Akcaoğlu et al., 2014; Akıncı et al., 2012; Banoğlu et al., 2014; Sayır, 2014; Yeni-Palabıyık, 2013). Studies, however, showed that in-service training on Fatih project did not meet teachers' expectations. In-service training was found to be insufficient by teachers due to "lack of expert support, lack of guidance, lack of practice, lack of content especially for technology, and less time" (Yeni-Palabıyık, 2013, p. 108). These teachers complained about the heavy course load and the lack of available time for learning to use Fatih project tools. Teachers also criticized the content and methods of in-service training (Banoğlu et al., 2014). There was a mismatch between pedagogy and technology in that the training they received was too technical and failed to illustrate them how to effectively integrate these tools into their teaching. The lack of technical support providing pedagogical and technical assistance was also a difficulty these teachers was confronted with during technology use (Akcaoğlu et al., 2014).

Teachers at a pilot school of Fatih project asserted that pre-service teacher education programs were not sufficient to gear them up for using technological tools effectively in their classes (Kocaoğlu, 2003). Teachers believed that for effective implementation of Fatih project, there should be a collaboration between MoNE and schools of higher education (Banoğlu et al., 2014; Dinçer et al., 2013).Pre-service teacher education programs should also update their curriculum to include courses on ICT to make sure that pre-service teachers have computer literacy and competency to use Fatih project tools successfully in their classes (Banoğlu et al., 2014; Dinçer et al., 2013).These programs, however, should "move beyond traditional sense (technical skill training) toward more practical and pedagogical manner" as indicated by Pamuk et al. (2013, p. 1819). Rather than a generic ICT course, pre-service

teachers should also be given courses or trainings in how to use Fatih project effectively in teacher education programs (Çiftçi et al., 2013).

Apart from perception studies, Kocaoğlu (2013) investigated the self-efficacy beliefs of 278 pilot high school teachers in Kayseri about integrating Fatih project tools into their classes. Teachers' self-efficacy beliefs were found to be of moderate level and be in negative correlation with teachers' age and year of experience. Those teachers using computers, social media and smart phones more frequently in their daily lives had higher levels of self-efficacy beliefs compared to teachers who had little or no use of these tools. In a similar vein, Yeni-Palabıyık (2013) examined the self-efficacy beliefs of 114 Turkish L2 English teachers working at Fatih project pilot study high schools in Sakarya about integrating project tools into instruction. The questionnaire and interview data showed that they had high levels of self-efficacy beliefs for technology integration whereas they "did not successfully and fully integrate technology in their instructional practices" as revealed by classroom observations (p.102). These teachers expected to have more "freedom for material selection, enriched course books and varied e-content" to better integrate technology (p.110). Celik (2012), on the other hand, found that the confidence levels of primary school teachers in Kırıkkale concerning IWB use were not satisfactory.

Alongside in-service training for teachers, several researchers pinpointed the need for a training program for students to enable them to use IWB and tablet PCs effectively (Salman, 2013; Yeni-Palabıyık, 2013). According to Dinçer et al. (2013), for the effective implementation of Fatih project, it is significant that students are computer literate and to this end, courses on computer technology should be integrated into curriculum starting from primary school onwards. As stated by school administrators, students should have judicious use of Fatih project tools and learn how to find quality material in internet (Dursun et al., 2013).

Fatih project aimed at creating student-centered classes (Akcaoğlu et al., 2014; Bilici et al., 2011) but research showed that Fatih project tools were used mainly as teacher tools in 'instruction-heavy courses' (Akcaoğlu et al., 2014). As noted by Akcaoğlu et

al. (2014), the school system that imposes high stakes university entrance exams on the students is not conducive to pedagogical changes that new technology necessitates. To tackle this challenge, Koehler, Mishra, Akcaoglu, & Rosenberg (2013) state the following: “Due to the intertwined relationships among technology, pedagogy and content, teachers face a great number of decisions. These decisions shift with permutations of technology, pedagogy, subject-matter and classroom context. The diversity of possible responses implies that a teacher should be an active agent and to become designers of their own curriculum” (p.4).

As far as the parents’ views on Fatih project are concerned, Güllüpınar et al. (2013) had a study on parents’ viewpoint of Fatih project at four pilot schools in Ankara, Karaman, Mersin and Uşak. The findings revealed that notwithstanding being an important stakeholder, parents did not have enough information about the project, thereby being wary about its benefits for their children. Güllüpınar et al., therefore, posited that parents should be made involved in the project. They should also be given in-service training to make sure that they are computer literate and contribute to the success of the project, also pointed out by Dinçer et al. (2013). They suggested that technology should be used as a medium to connect home and school and school materials should be accessible from everywhere for effective cooperation between parents and school.

For an examination of school administrators’ view on Fatih project, Dursun et al. (2013) had a study at five pilot schools in Ankara, Uşak, Karaman and Mersin. The school administrators generally supported the project stating that Fatih project tools enriched the classroom, made the lessons more attractive and promoted more effective learning for students. They also indicated that teachers’ resistance to technology started to fade and they developed more positive attitudes towards the new technology since the inception of the project. They, however, pinpointed the need for technical staff to help teachers who could not use IWB and tablet PCs effectively due to the lack of technical support. In a similar vein, Karataş & Sözcü (2013) studied the attitudes of school administrators at five districts in İstanbul

towards Fatih project. The study revealed that school administrators did not have adequate information about the project since they could not benefit from the training seminars and did not feel themselves competent enough to use it effectively for administrative purposes, which pinpointed the need for in-service training that proves to be useful for school administrators. Similar to Dursun et al. (2013), the administrators stressed the need for technical personnel to implement Fatih project tools effectively at schools.

Teachers, parents and administrators signaled radiation as a threat to students' health (Daşdemir et al., 2012; Dursun et al., 2013; Güllüpınar et al., 2013; Özdemir & Bozdoğan, 2014).

Nearly all of the studies on Fatih project were conducted at pilot schools of Fatih project. As different from these studies, Genç & Genç (2013) had a study with 184 primary school teachers at schools in Edirne, Bartın and İstanbul, where Fatih project were not implemented yet. In their study which examined the knowledge of these teachers about the project, it was revealed that teachers did have either no or insufficient knowledge and relied solely on TV to be informed by the project. Similarly, Gürol et al. (2012) had a study with 26 primary school teachers in Elazığ and found that these teachers already developed both positive and negative ideas about the project although it has not been put into operation at their schools yet.

2.5 Teacher Education and CALL

CALL, as a flourishing field, has started to make a strong foothold in the field of teacher education with a growing popularity and magnitude. As for the relationship between CALL and teacher education, Hubbard (2008) asserts:

> The future of CALL, I would argue, is closely tied to the future of language teacher education because language teachers are the pivotal players: they select the tools to support their teaching and determine what CALL applications language learners are exposed to and how learners use them (p.176).

As a corollary of the advancements in technology and its great influence on language teaching and learning, there have been a myriad of attempts to gear language teachers up for using technology in their classrooms including "one-time in-service workshop, dedicated courses and seminars, CALL course series, CALL certificates and even CALL graduate degrees". (Hubbard & Levy, 2006, p. 2).

As noted by Chapelle & Hegelheimer (2004), L2 teachers are in need of gaining a variety of computer skills to perform their profession in an up to date manner in accordance with the requisites of 21th century. They also need to be able to "choose, use, and in some cases, refuse technology for their students" (Chapelle, 2006, p. ix). To this end, there is a need for the training of teachers on an ongoing and regular basis (Halttunen, 2002) to be conducted by experts in CALL, as expressed by Hubbard (2009) below:

> As computers have come more a part of our everyday lives- and permeated other areas of education- the question is no longer whether to use computers but how. CALL researchers, developers and practitioners have a critical role in helping the overall field of second language learning come to grips with this domain (p. 1).

The rationale behind CALL teacher education mostly hinges on the importance of having computer literate teachers in 21th century (Kassen & Lavine, 2007) and that this literacy is sought for in the job sector of language teachers (Eskenazi & Brown, 2006; Hegelheimer, 2006; Hubbard, 2008; Kessler, 2006). According to Guichon & Hauck (2011), for an informed use of technology for language learning and teaching, CALL teacher education that is bolstered with suitable pedagogical and theoretical principals is of vital importance.

To outline the scope of CALL education, and define the expertise levels of the individuals being trained and trainers (i.e., practitioners, researchers, CALL specialists, etc.), Hubbard & Levy (2006) laid out a role-based framework for CALL education, which proposed two types of roles: functional and institutional. Functional

roles were germane to "what one does in relation to CALL" whereas institutional roles were concerned with "the anticipated responsibilities and expected levels of expertise within an organization" (p.5). They asserted that these roles could be used in the design of CALL based curricula and as job descriptors in educational settings where CALL is to be implemented.

Research on CALL and teacher education has grown out of the trainers' self-prepared guidelines for technology training, the investigation of teachers' perceptions about CALL course/ training and their content with the use of questionnaires and interviews as the main instruments but there is a recent inclination towards "action research" and "reflective practice"(Guichon & Hauck, 2011, p.192). Teacher reflection has also been used widely as a common data collection method in a myriad of CALL studies (e.g., Cutrim Schmid, 2011). For instance, in an in-service IWB training designed for German EFL teachers, Cutrim Schmid (2011) showed that video stimulated reflection provided teachers with ample chances to reflect on their IWB practices, the merits of IWBs in language classrooms and their professional development as technology users.

A significant body of CALL research has concentrated on teacher cognition (e.g., Cutrim Schmid, 2011; Whyte, 2011). These studies mainly revealed improved attitude towards the use of computers in language teaching and increased confidence towards using technology for teaching (Hegelheimer, 2006; Meskill et al., 2006; Olesova & Meloni, 2006; Peters, 2006). Another dimension of CALL research was the investigation of the extent to which CALL knowledge and skills were transferrable to real life teaching contexts (e.g., Kessler, 2006; Wong & Benson, 2006). Kessler (2006) posited that teachers do not integrate most of the technological tools they learn in a training course into their teaching provided that they are not 'technologically inclined' beforehand (p.27). If access to resources provided during the training is not available after the training, teachers also cease using the skills they acquired in the technology training (Butler-Pascoe, 1995; Egbert et al., 2002). Kılıçkaya (2012) examined how much of the pre-service CALL course was

transferred to teaching contexts of these teachers when they become in-service teachers and found that the course aided these teachers to use CALL-based materials, especially those taught in the training with an adjunct of the sources available on the internet in their classes.

Although there is a high demand for technology savvy teachers, this demand is not met due to the lack of CALL training in teacher education programs (Hubbard, 2009). As also pointed out by Oxford & Jung (2007, p.23), "… technology integration is unsatisfactory in teacher education". In a survey study applied to 240 TESOL MA graduate students interested in CALL, Kessler (2006) showed that CALL training lacked or was insufficient in teacher education programs as reported by these students. Due to the lack of formal CALL training in these programs, they had to rely on alternative and mostly informal sources of information to keep their CALL knowledge and skills up-to-date (Kessler, 2007). One primary reason for the lack of formal training in CALL is the lack of CALL experts who can get across CALL knowledge and skills to language teachers. Due to this shortcoming, CALL education is perpetuated by those self-trained and conducted in an ad hoc manner. (Hubbard, 2008; Hubbard & Levy, 2006).

2.5.1 A framework for CALL teacher education

In a comprehensive article, which synthesizes studies on CALL and teacher education, Hubbard (2008) posits that there are four main approaches to teacher education in CALL. These are "breadth first", "depth first", "integrated" and "online" (p.181-182). The breadth first approach can be described as a CALL course in which a wide variety of CALL tools are introduced as a baseline for more advanced CALL knowledge base with a dual focus on the technical and pedagogical skills. The depth first approach exemplifies a CALL course which exposes teachers to a "single" area in CALL in an "intensive" manner (p.181). The integrated approach showcases multiple cases of technology exposure in a variety of courses scattered through teacher education program. Finally, as the name suggests, the online approach suggests an online delivery for a CALL course, which is mainly

preferable due to “practical reasons” (p.182). As for the processes, they consist of “lecture/demonstration”, “project based”, “situated learning”, “reflective learning”, “portfolio based”, “mentor based”, “communities of practice” and “self-directed learning” (p. 182-185). There is only anecdotal evidence that one of these approaches or processes are superior to one another but it seems that each of them has pros and cons and has an edge over others in some respects.

A great amount of CALL researchers emphasized that CALL teacher education should be situated (Cutrim Schmid, & Hegelheimer, 2014; Egbert, 2006; Egbert & Brander, 2010; McNeil, 2013; Rickard et al., 2006). Egbert (2006) suggested that CALL training should be ‘situated’ in authentic contexts in that teachers should be exposed to real life cases regarding CALL use during the training. Reporting on a web-based distance CALL course which gets teachers and pre-service teachers to work in collaboration, she suggests that such a situated course will be more relevant to the needs of in-service and especially pre-service teachers who are devoid of the knowledge and experience to teach in a real classroom via CALL. According to Wentworth (1996), technological resources available during pre-service or graduate courses in language teacher education programs are not within the reach of language teachers when they start working and therefore pre-service teachers are especially in need of on-site experiences vis-à-vis CALL. Kessler & Plakans (2008) also emphasizes the importance of increasing teachers’ self-efficacy in CALL use by “contextualizing CALL teacher preparation in tasks that simulate real world teaching challenges” (p. 279). Coursework in CALL alone yields little success as revealed by Meskill et al. (2002) who had an interview with expert and novice teachers and found that teachers with classroom experience but with no formal CALL training were more comfortable in their technology use compared to novices with training in CALL. According to Partridge (2006), rather than being a technology expert, teachers should be informed about the practical applications of technology that they can use in the real context of their classes.

Some CALL courses incorporated project-based learning into their coursework. Debski (2006), for example, implemented a graduate CALL course at the University of Melbourne, Australia in which students worked on a project to develop a website for an authentic audience of Japanese students coming to Melbourne for five weeks to expose them to Australian culture before their arrival. According to Debski, CALL course including the development of a project and discussion of related theory served to link theory and practice by promoting "theory-in-practice learning" (p.111) for these graduate students.

2.5.2 CALL training for pre-service language teachers

There has been a myriad of studies which investigated the potential of CALL training for pre-service language teachers (Arnold, Ducate & Lomicka, 2007; Bauer-Ramazani, 2006; Desjardings & Peters, 2007; Egbert, 2006; Eskenazi & Brown, 2006; Hegelheimer, 2006; Kılıçkaya, 2012; Peters, 2006). CALL training mostly manifested itself in the form of an undergraduate or graduate course received in a teacher education program, in situated contexts with in-service teachers and virtual communities of practice.

Most of CALL courses introduced pre-service language teachers to a variety of CALL tools in a single course whereas some courses focused on the teaching of specific technology (e.g., automatic speech recognition software in Eskenazi & Brown, 2006). Some other CALL courses incorporated digital portfolios as a means of training pre-service language teachers on CALL (Cummins, 2007; Tochon & Black 2007; Van Olphen, 2007). These portfolios were reported to be meaningful means for learning about technology integration (Van Olphen, 2007).

To develop CALL related competences of pre-service language teachers, the role of faculty members was highlighted by several researchers. Kessler (2006) suggested that faculty members at teacher education programs, if not a CALL expert, should at least have some background and preparation in CALL. They should be convinced to develop some competence to integrate technology into their classes (Hegelheimer,

2006). They should also be a role model for their students in their technology use by developing a solid understanding of how to harness the benefits of technology for learning and teaching (Terry, 2007).

Robb (2006) posited that one of the foremost aims of teacher education programs should be to train self-directed and autonomous CALL learners and practitioners who can build up CALL expertise and maintain technology use in a self-driven manner. To this end, there is a high demand on these programs to provide teachers with foundational knowledge and skills on technology, the confidence to experiment with technology and the showcase of available sources of information on CALL (e.g., communities of practice, mailing lists, etc.).

Several CALL researchers (Desjardings & Peters, 2007; Peters, 2006) emphasized that a single CALL course was not enough to equip pre-service language teachers with the competency and confidence to integrate technology According to Peters (2006), this was mainly due to the difficulty of incorporating technical and pedagogical skills in a one-course:

> We observed that the students were frustrated by trying to learn technical and pedagogical competencies in a single course because they had a lack of preparation in the former. This divergence also became frustrating for students and professors alike because too much time was spent on technical skills development rather than on learning how to integrate these skills in one's teaching (p.156).

Hegelheimer (2006) argued that CALL course should be placed at the beginning of a teacher education program to serve as a foundation for other courses and to link technology related skills acquired via CALL course to language teaching practices. In a similar vein, Kılıçkaya (2012) noted that a CALL course in a teacher education program should be built on previous methodology courses and the link between CALL, SLA and English language teaching should be shown lucidly to teacher candidates.

2.5.3 CALL training for in-service language teachers

An extant body of research concentrated on CALL training given to in-service language teachers (Arnold et al., 2007; Chao, 2006; Jones & Youngs, 2006; Olesova & Meloni, 2006; Rickard et al., 2006; Wong & Benson, 2006; Youngs, 2007).

Meskill et al. (2006) presented a teacher mentoring scenario in which CALL was realized in real teaching contexts of in-service teachers with the collaboration of doctoral students expert in CALL and pre-service teachers. The 'expert- novice mentoring' process showed that all parties learned from each other and the collaboration among the parties facilitated the uptake and practice of CALL.

Rickard et al., (2006) reported a CALL training, which first trained technology savvy in-service teachers to train other teachers in their local contexts subsequently. As reflected in the survey data, the teachers were content with the training since it gave them the chance to discuss with peers and trainers and relate course content to their teaching context. In an overall evaluation of the course, they (2006) noted that the training was distinguishing since teachers' local needs and experiences were central to the training, which enabled them to give direction to their own professional development.

Olesova & Meloni (2006) reported on an in-service CALL course in which teachers not being technologically proficient were trained to design and implement collaborative Internet projects to provide authentic language learning environments for their learners. They revealed a positive change in teachers' viewpoints on the benefits of these projects for EFL learning and an increased confidence to use technology for this purpose.

As an example of project based CALL training, Chao (2006) described how in-service teachers enrolled in a graduate course created a WebQuest as a final project and were supported with the concept of scaffolding during this process. He showed that the CALL course served to challenge teachers' ideas on language teaching and the use of technology by enabling them to "think more like educators rather than

concentrating on the technical side while using technology (p.233). He also pinpointed problems pertaining to the implementation of the projects and suggested that such a project based CALL course should be divided into two parts: one half for creating the project and the other for implementing it in teachers' classrooms.

Hanson-Smith (2006) pointed out that independent of the benefits of any CALL training, in-service teachers are in a perennial need of perpetuating their professional development in CALL and this can be realized by teachers provided that they participate in communities of practice (CoPs). Such communities which link technology using teachers enable them to share insights, find immediate solutions to their problems in technology use and improve their technological know-how. Similarly, Arnold et al. (2007) showed that peer and expert online discussion groups composed of pre-service and in-service teachers enrolled in three different graduate courses possessed many features of CoPs. Hoven (2007) also showcased how in-service teachers enrolled in an MA course became a community of learners "through the experiential and task-based approach to learning in the course and in the absence of teacher intervention" and thus proceeded towards being a community of practice (p.152).

2.5.4 Online CALL teacher education

Despite a wealth of studies focused on the preparation of online language teachers (e.g., Compton, 2009; Guichon, 2009; Hampel, 2009; Hampel & Stickler, 2005; Hauck & Stickler, 2006; Jones & Youngs, 2006; Levy, Wang, & Chen, 2009; Youngs, 2007) and various studies incorporating face-to-face instruction with computer mediated communication (CMC) in a CALL training / course (e.g., Son, 2006) there have been very few studies concentrating specifically on a training delivered wholly online with little or no prior face-face component (e.g., Bauer-Ramazani, 2006; Egbert, 2006; Johnson, 2002).

According to Hall and Knox (2009), "language teacher education by distance (LTED) has become a widespread and important practice in the pre-service and in-

service education of teachers, and in language education internationally" (p. 63). Online education, as a form of distance education, however, has not been practiced widely in CALL teacher education despite the various advantages it offers for pre- and in-service language teachers. Practicality is one of the main advantages (Hubbard, 2008) since it enables teachers from different locations to perpetuate their professional development in CALL. Exposure to a variety of technological tools in online training is very likely to upskill the teachers technologically. There is also a common belief that if teachers benefit from having an online learning experience, they are more likely to be capable of infusing technology into their classes (Youngs, 2007).

In an online situated CALL course which links pre-service and in-service teachers through a Web-based platform, Egbert (2006) suggests that the online experience allows both parties to learn about CALL in authentic contexts and gain familiarity with distance technologies as they use it in the online course as expressed below:

> Theoretically, situating learning in teachers' classrooms through distance education gives both pre-and in-service teachers an opportunity to put new ideas into play immediately and to see the outcomes as they happen in authentic settings. Teachers can thereby test new assumptions as they are presented, see student improvement, and reflect on their practice. In addition, teachers studying to use technology in their classrooms gain additional understanding by working through and with the variety of distance technologies involved in Web-based distance coursework (p.169, 171).

Bauer-Ramazani (2006) reflected on an online CALL course in a teacher education program which consisted of the incorporation of various synchronous and asynchronous communication tools, hands-on tasks, assignments and projects that are created for an authentic purpose to be used in real life teaching contexts, readings on CALL theory and collaborative tasks, all of which served to form an 'online community of learning'. Reporting positive comments from the teacher trainees, Bauer-Ramazani emphasized that the online CALL course was conducive for

creating a learner-centered language classroom bolstered with the benefits of using various communication tools in the online experience.

2.6 Success factors in online environments

The field of education has been one of the most active adopters of online modes of instruction in lieu of face to face mode of delivery (Saltmarsh & Sutherland-Smith, 2010). Due to their high potential for promoting enhanced learning experiences, teacher education programs utilizing internet technologies have proliferated in the last few decades (Bishop & Foster, 2011). In a similar vein, the advantages of distance modes of delivery for the training of language teachers have been expressed by many researchers (e.g., Hall & Knox, 2009). As regards these advantages, Holmber (1989) referred to the "convenience, flexibility and adaptability of this mode of education", which served to meet individual needs (p.24). As a concomitant of the recent move towards distance education, the language teacher education has also started to be carried out by distance as a recent widespread practice (Hall & Knox, 2009).

Over the years, distance education has taken the form of different technologies such as "radio and television broadcasting, audio and video recording, live, two-way interactive audio and video" and today "Internet-based learning" is commonly used in the field of education (Çağıltay, Graham, Lim, Craner, & Duffy, 2001) with an aim to refer to the type of learning peculiar to online education (Carr- Chellman & Duchastel, 2000). According to Harasim (2000), online and distance education, though sharing some qualities are not the same as each other and online education is much closer to face-to-face instruction due to the group interaction involved. As indicated by Harasim (2000), time and place independence, group-wise communication, the use of multiple media and computer mediated communication are the unique features of online education.

Online education is suggested to be conducive to constructivist models of learning (Carr- Chellman & Duchastel, 2000; Zhu, Valcke, & Schellens, 2010) and learner-centered learning experiences (Knowlton, 2000; Bauer-Ramazani, 2006). The

interactive and collaborative nature of online courses is also a great advantage of these environments. (Heirdsfield, Walker, Tambyah, & Beutel, 2011). Despite these pros, as pinpointed by Hukle (2009), "unfortunately, some students are taking online classes without being equipped with the necessary skills required for successful completion" (p. 72). To this end, it is of pivotal importance to define these skills along with an examination of factors affecting success in online environments.

Success factors in online education have been subject to a myriad body of research (e.g., Abel, 2005; Baker & Schihl, 2005; Bekele, 2008; Salter, 2005). In a comprehensive framework, Bekele (2008) summarizes these factors as follows.

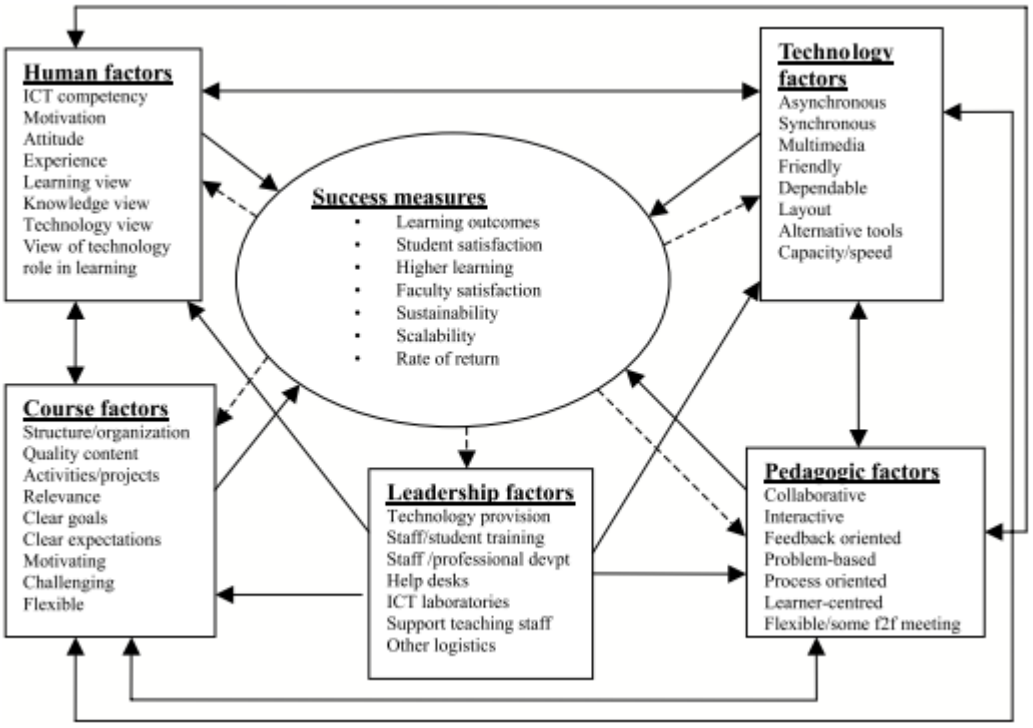

Figure 2. Model of Success and Success Factors in Internet-supported Learning Environments. Reprinted from Bekele, 2008, p. 57)

According to this model, success in online environments hinged on the interplay of human factors, technology factors, course factors, leadership factors and pedagogic factors.

The importance of course and pedagogic factors has also been highlighted in other studies (e.g., Çağıltay, Graham et al., 2001; Carr-Chellmann & Duchastel, 2000; Novitzki, 2005). Çağıltay, Graham et al. (2001), for instance, adapting Chickering's seven principles for good practice in undergraduate education to online education argued that online courses should embody a good rapport between student and faculty, promote active learning and effective cooperation among students, give space for different learning styles, get across the course objectives clearly and explicitly, give timely feedback and keep students on task through effective monitoring.

Human factors were emphasized in a wide array of studies (e.g., Salter 2005; Shih, Muñoz, & Sanchez, 2006; Yan, 2006). These factors mostly comprised motivational and attitudinal factors along with technical skills to survive in online environments. Basic or moderate level of ICT competence (Erlich, Erlich-Philip, & Gal-Ezer, 2005; Menchaca & Bekele, 2008), prior experience in using Internet (Shih et al., 2006) and confidence in online technologies (Song, Singleton, Hill & Koh, 2004) were found to play a vital role in managing the online courses. To target deficiencies in any of these, Hukle (2009) suggested specifying threshold values for these variables and offering training for improving these deficiencies. In addition to the above discussed variables, learning styles also affected students success in cyberspaces (Yukselturk & Bulut, 2007), which suggested that different learning styles should be addressed in these environments to meet individual needs.

Technology related factors required dependable technologic infrastructure, which is necessary for a seamless online experience (Song et al., 2001). The incorporation of various technologic tools such as synchronous and asynchronous tools were also found to be important for success in online environments (Carr-Chellman & Duchastel, 2000; Menchaca & Bekele, 2008). Finally, leadership factors included the provision of technology, technical personnel, administrative support in addition to the training of students and staff (Bekele, 2008) as also revealed in a host of studies (e.g., Abel 2005; Baker & Schihl, 2005).

CHAPTER 3

METHODOLOGY

This chapter establishes the methodological foundation of the study by referring to the research methodology, research questions, data collection instruments and analysis procedures together with a detailed elaboration on the design elements of the "Online Training on Using Technology in L2 Classes".

3.1 Research Methodology: Qualitative Research

This study takes on a qualitative methodology to the collection and analysis of data. Qualitative research is a paradigm that holds a qualitative perspective towards collecting data with an elaborate study on the realities of phenomenon in their natural settings (Yıldırım & Şimşek, 2011). It is rooted in the value of socially constructed meaning and chooses its main focus as the participants and "how participants experience and interact with a phenomenon at a given point in time and in a particular context, and the multiple meanings it has for them." (Heigham & Croker, 2009, p. 7). Denzin and Lincoln (2005) define qualitative research as follows.

> Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practises transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them. (p.3)

Qualitative perspective is adopted when a detailed exploration and a deep understanding of a complex issue is needed to study specific group(s) of people or populations (Creswell, 2007). There are five main approaches to qualitative research.

These are narrative research, phenomenology, grounded theory, ethnography, and case study (Creswell, 1998).

3.1.1 Case study

Case study is the scrutiny of a "bounded system", a case or multiple cases (Merriam 1998, p.9) with an in-depth analysis of context through multiple sources of data collection (Duff, 2008). According to Yin (2009), case study is required when a deep understanding of a phenomenon which is mostly surrounded by important contextual conditions is necessary.

Gall, Gall, & Borg (2003) define case study research as "the in-depth study of instances of a phenomenon in its natural context and from the perspective of the participants involved in the phenomenon" (p. 436). The concept of 'case' here refers to any individual, group, institution or anything that is bounded in a unique system (Stake, 2005). A detailed study of specific entities bounded by specific contexts then underpin case studies and provide a thorough analysis of these entities.

This study is also a case study due to its bounded nature. The sample of participants is drawn from a case, which is identified as Turkish EFL teachers working at high schools in a certain district in Ankara, Turkey. The case is comprised of these teachers who have attended an online in-service CALL training for a 4 week period and hence share certain characteristics and are bounded by certain contextual conditions. The study seeks to uncover their practises of technology use while teaching English and also examines their perception about the online in-service training they have completed. To this end, multiple sources of information have been collected through a background questionnaire, pre-study and post-study interviews, reflection reports and field notes, which is an important characteristic of a case study.

3.2 Research questions

The research questions this qualitative study aimed to answer were the following:

1. To what extent does a group of Turkish EFL teachers use technology in their classes?

2. What factors affect their use of technology?

3. What are their perceptions of the online in-service CALL training?

4. What are the reasons for some teachers' leaving the online in-service CALL training?

5. To what extent do the teachers completing the training believe they can apply the tools they have learnt in the training to their own classrooms?

6. What factors affect these beliefs?

3.3 Participants

3.3.1 Sampling procedure

The participants of the study were recruited based on convenience sampling, which refers to "the selection of individuals who happen to be available for the study" (Mackey & Gass, 2005, p. 122) and is generally composed of willing or volunteer participants. According to Dörnyei (2007), a qualitative study should adopt a sampling strategy that is in line with the purposes of the study. This study did not aim at making generalizations about a population but was focused on the experiences or perspectives of a relatively small number of participants, which is typical of qualitative research in which understanding the meanings of entities, events, facts from the perspective of those involved is crucial. (Richards, 2003). Therefore, convenience sampling, though not being the most ideal but "practical" sampling procedure (Dörnyei, 2007, p. 129) is adopted by this study due to its "convenience for the researcher". Since this online in-service CALL training was not a governmental initiative and hence did not have a compulsory aspect, the researcher needed to draw on the participants' volunteerism, which was on a par with convenience sampling method.

3.3.2 Participant characteristics

The participants were Turkish EFL teachers working at high schools in Çankaya district in Ankara, Turkey. They were 23 volunteer teachers who accepted the

invitation of the researcher to attend an online CALL training by sending an e-mail to the researcher or phoning her. However, this number was not stable and there were dropouts as the study progressed. In the first week of the training, there were 13 teachers who signed up in the asynchronous platform called Edmodo and there were 14 teachers who attended the live session in WizIQ. At the end of the training, there were 8 teachers who completed the training as shown in Table 1.

Table 1. Participant Profile

Name	Gender	Age	Year of Teaching	Background questionnaire	Pre-interview	Post-interview	Reflection report
Fatma	F	50	23	X	X	X	X
Gönül	F	47	32	X	X	X	X
Melek	F	47	18	X	X	X	-
Sevil	F	49	19	X	X	X	X
Ahmet	M	45	21	X	X	X	X
Nevin	F	37	12	X	X	X	X
Cemre	F	40	15	X	X	X	X
Göknur	F	38	15	X	X	X	X

These 8 teachers were given a background questionnaire and took part in pre and post study interviews. Of all the teachers leaving the training, 6 of them filled in the questionnaire and only 4 of them also had the pre-and post-study interviews. In order not to intermingle the data, only those 4 teachers who not only filled in the questionnaire and but also had both of the interviews were included as the study participants along with 8 teachers completing the training.

3.3.3 Background information on the teachers completing the study

Of all those 8 teachers completing the training, 7 of them were females and only 1 of them was male. Their age ranged between 37 and 50 while their year of teaching

varied between 12 and 32.These teachers currently taught high school students including prep-class, 9th, 10th, 11th and 12th grades. 2 of these teachers had also prior experience of teaching primary and secondary school students from 4th to 8th grades. 5 of the teachers held a BA in English Language Teaching (ELT) and other 3 teachers were graduates of the departments of Physics, English Language & Liteature and Translation &Interpretation. Only one of the teachers had an MA degree from an ELT department. The profile of the teachers is shown below in table 2.

Table 2. The profile of the Teachers Leaving the Study

Name	Gender	Age	Year of Teaching	Pre-interview	Post-interview	Reflection Report
Yeşim	F	44	24	X	X	-
Nurten	F	34	10	-	X	-
Makbule	F	47	25	-	X	-
Sevgi	F	34	9	X	X	-

Most of the teachers reported not to have taken any courses or any training on educational technology. Only 3 of them received basic computer training and the teachers having Fatih Project tools in their classes had a two-week online seminar on how to use the project tools. For professional development, except for one teacher, all of the teachers attended at least one conference and read journals on L2 teaching.

As regards personal use of technology, nearly all of the teachers had access to computer and the internet at home. Except for three teachers, who did not use their computers at home, the remaining teachers used their computers at least a few times a week.

The teachers mostly used the computer for e-mails and surfing the internet whereas only two teachers mentioned using chatrooms. In relation to access to technological equipments in class setting, only three of the teachers had both computer and internet

in their classes while some of the teachers had either computer or internet. Half of the teachers also did not have a computer lab at their schools. Concerning the infusion of technology in language classroom, four of the teachers reported to integrate technology into their classes four days a week on average whereas the remaining two teachers indicated that they never used technology in their classes.

Due to the few number of participants, no statistical analysis was conducted on the questionnaire data. The likert scale items measuring teachers' perceived confidence about technology integration showed that except for two teachers who leaned towards the negative end of the scale, the other teachers tended to perceive themselves competent at integrating technology into their classroom. Pertaining to attitude towards technology, all of the teachers were close to the positive end of the scale showing a positive attitude towards the use of technology in language classroom.

3.3.4 Background information on the teachers leaving the study

Among the four teachers leaving the study, all of them were females whose ages ranged between 34 and 47. Three of them were currently teaching 9^{th}, 10^{th} 11^{th} or 12^{th} graders while one of them was teaching 4^{th}, 5^{th} and 6^{th} graders. Only two of them were graduates of ELT department.

Three of them reported not to take any course or training in educational technology. All of them stated to either attend conferences or read journals on L2 teaching. In relation to personal use of technology, all of the teachers had computer and internet at home and used them at least a few times a week. Word processing, e-mail and surfing the internet were among the main uses of computer.

Regarding the technology in their classroom, all of the teachers indicated that they did not have a computer in their classroom. Internet was also not available for these teachers while three of the teachers had a computer lab at their schools. These three teachers reported to incorporate technology into their classes only a few hours a week in average.

The likert scale items related to perceived self-confidence about technology integration showed that except for one of the teachers, all of the remaining teachers tended towards the negative end of the scale indicating low level of self-confidence for the integration. All of the teachers also displayed a positive attitude towards technology except for one teacher who was undecided about the merits of technology for teaching foreign languages.

3.4 Design and Procedure

The researcher negotiated with officials from the Ministry of Education to be entitled to give an online CALL in-service training to Turkish teachers of English. To have a more focused training aimed at a certain age group of EFL learners, she asked to conduct this training with only teachers working at high schools. Due to the vast number of high schools in Ankara, the researcher chose a specific district in Ankara, Çankaya district and only the high schools in this district were included in the study. By virtue of having a more balanced socio-economic background, Çankaya district was deemed to have high schools which are more technologically equipped and hence teachers have more chances to use technology in their classes.

To inform the teachers about the online CALL training, an invitation letter which included weekly content and tasks were sent to the schools. Considering that time investment is an important matter for teachers, total number of hours the teachers need to spend each week for this training was specified with the purpose of encouraging the teachers to attend the training. (See Appendix E for the letter). At the end of some administrative processes, the researcher was given a list of teachers who volunteered for attending the in-service training. Attached to this list indicating the schools where the teachers worked was another list with the phone numbers of these schools. The list comprised 52 teachers, nearly all of whom were teachers at high school. To the surprise of the researcher, there were also a few teachers who worked at primary schools among the volunteers.

To reach the teachers and get their e-mail addresses, the researcher called the schools, talked to the school principles and got the teachers' contact information. The

contact information was mostly phone numbers since the schools did not have a record of their teachers' e-mail addresses. At some schools, the researcher was provided with e-mail addresses right away. As a result of the processes of either calling these 52 teachers or e-mailing them, the researcher got positive responses from only 23 teachers.

Teachers had different reasons for not attending the training. Some said they did not volunteer for it but the principal wrote their names on the list. Some complained about their busy schedule and had no time to allocate for this training. Most of the time, they were not informed about its voluntary aspect. When the researcher compiled e-mail addresses, which was one week before the training started, she sent an e-mail to the teachers to provide them with detailed information about the syllabus of the training and weekly tasks by directing them to the wiki page created for the class. A few days later, a reminder e-mail was sent to the teachers to encourage them to do the Pre-training tasks before Week 1 started. To that e-mail, a background questionnaire was also attached to collect some information about the teachers.

3.4.1 The theoretical premises of the "Online Training on Using Technology in L2 Classes"

This online in-service CALL training was designed based on the following theoretical premises with an aim to:

- expose teachers to a variety of CALL tools through demonstration, hands-on tasks and peer-to-peer discussion with a "*constructivist approach*" and develop their techno-pedagogic competence
- form a "*learning community*" that interacts, shares and co-constructs knowledge by using synchronous and asynchronous platforms
- enable teachers to reflect on their current teaching practices and future technology use through "*reflective practice*" by writing reflection reports in their blogs both as a data collection method and a professional development activity.

3.4.2 The design elements of the online training

In the design of the online training, the researcher followed "The seven principles of good practice: a practical approach to evaluating online courses" by Çağıltay, Graham et al. (2001), which was designed for the evaluation of online courses at undergraduate level. These principles were found to be convenient to be used as guidelines in the design of the online CALL training by the researcher and were as follows:

1. *Good practice encourages student faculty contact:* To develop trainer-trainee interaction and enable the flow of the online training without any problems, the trainers shared their e-mail addresses with the trainee teachers. They developed the policy of responding to e-mails in a two day time frame. They also motivated the teachers to use the asynchronous platform Edmodo for any questions or any content or idea they want to share with the trainers and other trainee teachers. Upon a request of some teachers who could not cope with some technological problems, the researcher also shared her mobile phone with some of these teachers.
2. *Good practice encourages cooperation among students:* Having students discuss issues related to course content is a good way of encouraging student-student cooperation (Çağıltay, Graham et al., 2001). To this end, during the live session in the synchronous platform WizIQ, after the trainers demonstrated new technological tools to the trainee teachers, they asked them to consider and discuss ways to use these tools while teaching language skills. Hence, they had a discussion on the potential use of these tools in language classes and exchanged information. A specific discussion task was not included as part of weekly tasks due to the researcher's observation that teachers had a heavy workload at schools and did not have much time for having asynchronous discussion. To develop a good rapport among trainee teachers, they were required to introduce themselves and give personal information in Edmodo in the first week of the training. In order to motivate

them to exchange ideas and learn from each other, they were also required to share their blog posts and the CALL material or tools they developed every week with other teachers.

3. *Good practice encourages active learning:* Reflecting on your learning process promotes active learning (Çağıltay, Graham et al., 2001) and blog writing, which required teachers to reflect on the training and the transferability of the technological tools to their classroom setting was used to this end. Moreover, learners become more active when they see the relation of the learning experience to their own lives. To achieve this, the content of the live session focused on real life classroom applications along with weekly tasks which required teachers to create CALL materials they can use in their classes. Another dimension was that the teachers were given some flexibility in the choice of some tasks and some of the tasks were kept optional due to the researcher's realization that they cannot be fulfilled by every teacher. That teachers were required to share the tools or materials they developed with other teachers also served to motivate them to get actively engaged in their learning process.
4. *Good practice gives prompt feedback:* By virtue of the voluntary nature of the training, teachers were not assigned any grade but the fulfillment of the tasks was enough for a successful completion of the training and getting a certificate of attendance. The trainers gave immediate "acknowledgment feedback" to the teachers in Edmodo by confirming that the completed tasks were appropriate. They thanked the teachers for their effort and sometimes made some comments if necessary. E-mails were also checked every day by the trainers to answer any teacher questions.
5. *Good practice emphasizes time on task:* With an aim to maintain teachers' engagement in the training and keep them on task, specific deadlines were set for weekly tasks. Teachers were also sent e-mails regularly to be informed about weekly content and tasks.

6. *Good practice communicates high expectations:* To give detailed information about the training and specifically about the workload for the teachers, the trainers created a wikipage which encompassed information about the course, communication tools, weekly content, syllabus, specific instructions on weekly tasks and their deadlines. To be explicit in the requirements of the training, weekly tasks included a checklist which were both announced on the wikipage and e-mailed to the teachers at the end of each live session.
7. *Good practice respects diverse talents and ways of learning:* In order to address the various teaching backgrounds of the trainee teachers and enable them to feel as a learning community, the trainers asked them to provide personal information about themselves in Edmodo as an "ice-breaker activity" in the first week of the training. In addition, in live sessions, they were motivated to express their point of view on topics raised by the trainers and other teachers. Real life examples and suggestions on the ways to transfer CALL tools to real teaching contexts were highly valued and encouraged by the trainers.

3.4.3 Weekly Content of the Online CALL Training

The design of the weekly content was made by one of the trainers who had prior experience in using the syllabus of the training in a pre-service CALL course. In addition to this, with an aim to check the validity of the syllabus and its convenience for the participant teachers, expert opinion was gained from three researchers excelling in CALL, who approved the convenience of the syllabus for its use in the online CALL training.

3.4.4 Weekly Tasks

During this 4-week online training, the participants were assigned to fulfill some tasks each week for a successful completion of the training. The rationale behind the weekly tasks was to engage the participants in the content and provide them with ample chances to try out the technological tools introduced in the training. Weekly

tasks included attending the live session in WizIQ, using Edmodo to share the links to the websites and blogs they created or uploading the digital materials they developed and writing a reflection report in their blogs each week. One week, the teachers were also asked to use some of these technological tools in their classes, but this was kept optional since most of the teachers did not have much chance to apply what learnt in the training to their classes right away as revealed in the pre-study interview. (See Appendix F for weekly tasks)

3.4.4.1 Pre-training

Pre-training week was one week before the training commenced. The aim of pre-training tasks was to register the teachers to the platforms that will be used during the online training. Links to these platforms to be used for asynchronous discussion and live meetings were provided in Pre-training navigator in the wikipage. The background questionnaire was also reminded to the teachers to be e-mailed to the researcher as one of the pre-training tasks.

3.4.4.2 Week 1

The tasks of this week consisted of reading an article by Prensky (2001), creating a blog, getting a Feedly account, writing a reflection report in the blogs and sharing the link of their blog post in Edmodo. The teachers were given flexibility about the content of their blogs but required to keep some space for writing their reflection reports. The article was mainly added as a recommended reading and kept optional since the researcher did not want to overload the teachers with lots of tasks, which could have led to dropouts.

3.4.4.3 Week 2

In week 2, the participants were required to write a reflection report, share the link of their blog post in Edmodo and also use some of the technological tools of the week (Google Docs, Google Hangout and WizIQ) in their classes. This second task was optional and the teachers were asked to do the task only if it is manageable in their context. Although none of the teachers had a chance to apply these tools in their

classes, they ruminated about the ways to use them in their contexts and elaborated on these ideas in their reflection reports.

3.4.4.4 Week 3

The tasks of Week 3 comprised creating a website, sharing its link in Edmodo, revising a rubric for website evaluation and lastly writing a reflection report. The teachers were expected to give some personal information about themselves or the classes they teach and put some pictures or videos in their websites .Website evaluation rubric was provided as an additional material to give the teachers an opinion about the quality criteria of websites.

3.4.4.5 Week 4

In Week 4, the teachers were given the option to choose among three tasks, which were preparing a presentation, digitalstory or podcast. They were required to upload one of these on the class page in Edmodo and also write a reflection report.

3.5 Communication Tools

3.5.1 Pbworks

Pbworks is one of the most frequently used wiki tools that is also very popular in educational settings. According to the information given in the website (http://www.pbworks.com/education), "Pbworks hosts over 300.000 educational workspaces", and contributes to effective teaching and learning for many students and teachers worldwide. To this end, the trainers also opted for using Pbworks as a wiki workspace since the use of wikis enable the creation of "constructivist learning environments" and enhances "effective collaboration" among learners (Zorko, 2009, p.645).

A wiki page (http://technologyforteachingenglish.pbworks.com/) shown in Figure 3 was created as the main medium of information about the content, syllabus and tasks of the online training which was called "Online Training on Using Technology in L2 classes". In pre-training, the teachers were directed to this wiki page to be introduced

to the training and informed about its requisites. The wiki involved a welcome message addressing the teachers, bio- information about the trainers, syllabus, communication tools, weekly tasks, deadlines and also information about technology support. For technology support, the teachers were recommended to share their technological problems in Edmodo but they were also encouraged to contact the trainers through e-mail in urgent situations. The rationale behind this practice was to promote interaction among the teachers by giving them opportunities to share and learn from each other. Throughout the training, however, the teachers did not prefer sharing their technological problems via Edmodo or e-mail, which led the researcher to add a question about this preference in post-study interview.

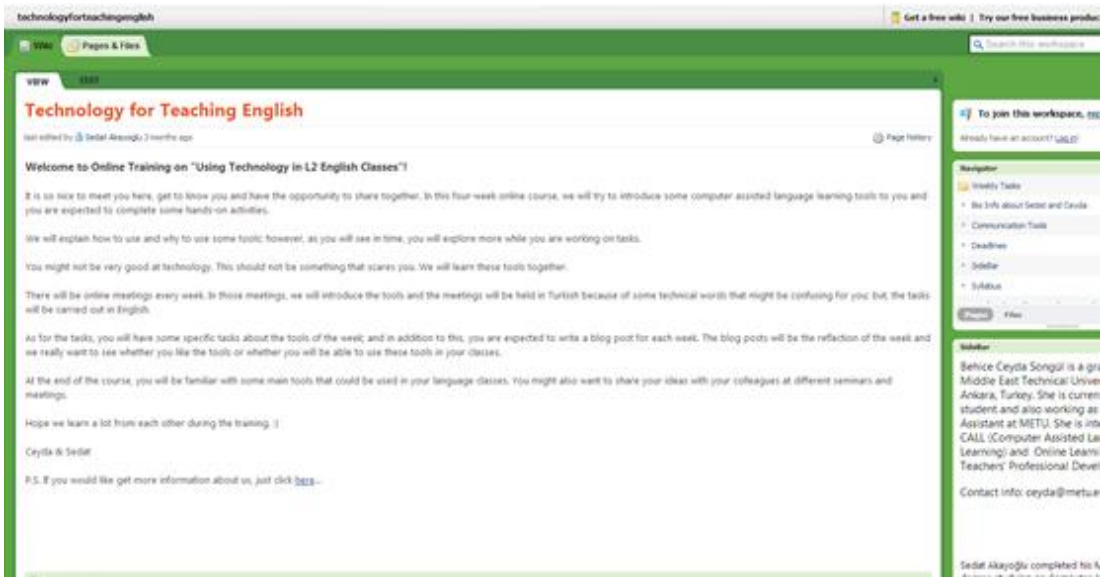

Figure 3. A Snapshot from Pbworks Page

3.5.2 E-mail

E-mail has been transferred to educational settings and used widely since "the mid-1970s" together with computer conferencing leading to changes in the "relationship of the learner to the teacher and to the content of the curriculum" (Harasim, 1996, p.203). With the advent of e-mail, online education became prominent and came up as a common educational practice (Harasim, 2000). This online training also

integrated e-mail into its design as a means of communication among the trainers and teachers.

Throughout the training, e-mailing was mainly used to remind the teachers of weekly tasks and deadlines, provide them with the links of the live sessions and the recordings of these sessions, and also arrange a time for pre- and post-study interviews. At the outset of every week, the trainer sent an e-mail to the teachers to inform them about weekly tasks by giving them a checklist. On the days the live sessions took place, she e-mailed the teachers to provide them with the links of these sessions. An hour before the sessions started, she sent a subsequent reminder e-mail about the session. After the sessions ended, she sent them another e-mail with the links to the recordings. In addition, e-mails were used also to notify the teachers of the documents or materials uploaded on Edmodo. Although e-mailing was intended to be between the trainer and teachers and also among teachers, the interaction through e-mail was mostly limited to be unidirectional from the trainers to the teachers. The trainers did not get any questions or comments about the course content or weekly tasks via e-mail from the teachers except for those times when the trainer and teachers negotiated on a time for interviews.

3.5.3 Edmodo

Edmodo is a web-based environment that allows teachers to create virtual classrooms for their students and extends the learning and teaching process to an online setting. It is a free "platform that provides a safe and easy way for your class to connect and collaborate, share content, and access homework, grades and school notices" (http://www.educatorstechnology.com/2013/06/a-handy-guide-to-everything-teachers.html). Since its launch in 2008, it has been embraced tightly by the field of education globally and its use in blended and online classes continues to gain more momentum lately. As different from other social networking tools such as Facebook, which also calls forth the establishment of connections among people, Edmodo is deeply rooted in education and used mainly for educational purposes.

In Edmodo, teachers can create group pages for their classes, upload digital resources, assign homework, create polls and communicate any information about the course content to their students. In addition to these features, Edmodo also allows teachers to connect with other teachers worldwide and learn from each other, which can be seen as an opportunity for teachers' professional development. Adding connections with the teachers or students from other parts of the world and subscribing to communities in different subject areas such as Math, Language Arts, Computer Technology, etc. are also possible in this platform.

By virtue of these features, the trainers decided on using Edmodo to set up a classroom page (See Figure 4 for the interface). It was aimed at boosting the sharing among teachers and enable them to feel as part of a community of practice (CoP) (Lave & Wenger, 1991). Through this platform, the teachers were required to turn in their assignments, post the links of their blogs to share their reflection reports and also write about the technological problems they encountered. The trainers gave feedback on the teachers' assignments and also uploaded some documents (e.g., PPPs, Word documents, tutorials, etc.) related to the content of the training.

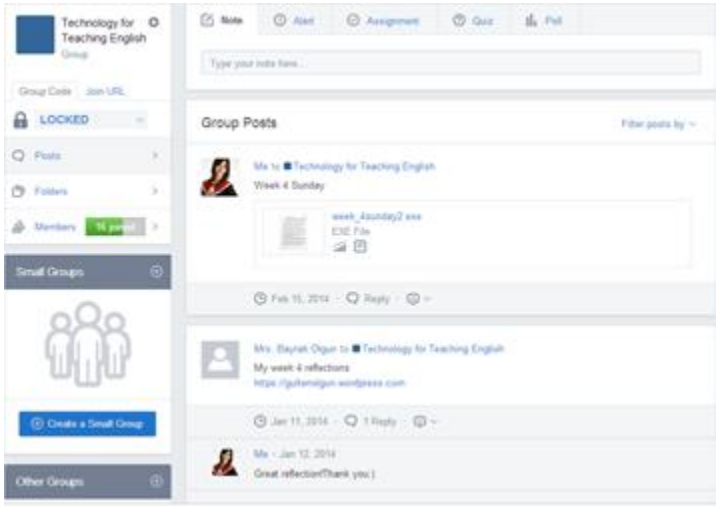

Figure 4. A Snapshot from Edmodo Page

3.5.4 WizIQ

WizIQ is one of those platforms that enables the educators to conduct fully online courses or integrate live sessions into their everyday instruction. It renders online classes and lessons feasible for educators with its audio and video features as an add-on to its whiteboard tools. For online teaching and learning, it has started to become popular since its launch in 2007. As written in the main page of the website, "there are more than 250.000 teachers and 3.5 million learners that use WizIQ" from across the globe (http://www.wiziq.com/).

WizIQ is free for 30 day trial, but requires some payment on the part of the teacher or organization for further use. One of the advantages that WizIQ has over other synchronous live tools is that it allows unlimited number of attendees on the condition that they sign up with a WizIQ account. In WizIQ, teachers have the opportunity to teach real-time with high quality video and audio tools, use the interactive whiteboard with learners, upload and share documents. There is also chat board for synchronous written communication. The learners can participate actively in the lesson via this chat board or use the Raise Hand option to use audio or video tools. Screen sharing is also possible in this platform, which works very well when the teacher wants to share his/her desktop. Attendance reports and also the recordings of the sessions are one of the others features at teachers' disposal. WizIQ can be integrated into Moodle or other websites.

In this online training, WizIQ was used as the main medium for content delivery. (See Figure 5 for a screenshot from the live session in WizIQ). Every week, the trainers scheduled live classes on two different days with the same content to introduce some technological tools and discuss their potential to be used in language classes with the teachers (See Appendix G for the syllabus of the training).

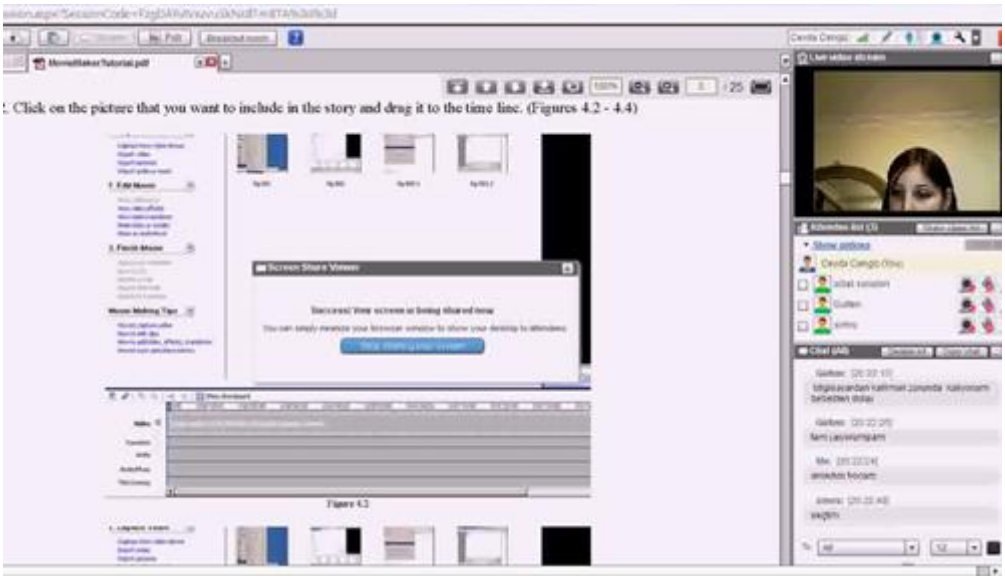

Figure 5. A Snapshot from the live session in WizIQ

3.5.5 Blog

Blogs have become commonplace in education with an increasing number of professionals using blogs for instructional purposes and especially for the purposes of language teaching and learning (Richardson, 2005). In addition to their use by language learners, blogs also stand as a useful web tool for pre-service and -in-service language teachers who can have reflective thinking on their daily practises via blogs, and thus improving their teaching. According to Yang (2009), blogs can be employed to promote high level of "critical reflection" and create a "community of practice" for language teachers. To achieve these two aims, the researcher included blogs as a weekly task with an eye to motivating the teachers to reflect on their learning processes and also enable them to feel themselves as part of a community of language teachers.

In the first week of the training, the trainers introduced blogs as an educational tool, modeled how to set up a blog account and discussed its potential use in language classes with the teachers. As a blog-hosting site, Wordpress was preferred since it is free, user-friendly and also easy to use (http://wordpress.com/) so that the teachers could use the blogs with ease during and after the training.

The teachers were required to set up their individual blogs for the first week and use these blogs for writing a reflection report in the subsequent weeks. Rather than a class blog, individual blogs were preferred in order to give the teachers a private space and also provide them with the flexibility to discover the specific features of blogs freely on their own pace. This was considered to improve their competence in using blogs and increase the chances to integrate them into their own language classes.

Teachers' blogs was made open to public so that the teachers can be more motivated to use blogs for sharing their ideas with other professionals from the world which can contribute to their professional development. In order to guide the teachers during their reflection process, reflection questions were given, which is a common practice in some earlier studies on blogs (e.g., Lui, Choy, Cheung & Li, 2006). The teachers were also encouraged to post blog URLs to the class page in Edmodo to share their reflection reports with other teachers, which was aimed at boosting the interaction among teachers.

3.5.6 Mobile Phone

In order to contact the teachers before the training, the researcher used cell phone information about the teachers that she received from the school principals when she was not provided with the e-mails of teachers. The researcher trainer also gave her phone number to the teachers and encouraged them to call her whenever they needed help. In the first week of the training especially, a few teachers called the researcher to ask questions about signing up in Edmodo or attending the live session in WizIQ. Mobile phone was also used later to agree on a suitable time for pre-and post- study interviews.

3.6 Data collection instruments

3.6.1 Background questionnaire

With the aim of collecting background information about the participants, a 50-item questionnaire was conducted to all 8 teachers who completed the training and 3

teachers who left it. The questionnaire consisted of 5 different sections, which attempted to collate different kinds of information about the participants.

The first section, which examined the teachers' self-efficacy beliefs for integrating technology into their classes was a 21-item Likert scale, which required the participants to give answers in one of 5 ways ranging from Strongly Agree to Strongly Disagree. (e.g., "I feel confident that I can successfully teach relevant subject content with appropriate use of technology." "I feel confident that I can monitor students in appropriate uses of technology. "). The items of this section were taken from Wang's study (2004), in which construct validity and reliability were guaranteed with high Alpha coefficient of .94 (for pre-survey) and .96 (for post-survey) at the end of factor analysis process.

The second section included 11 Likert scale items and tested the teachers' attitude towards technology as an instructional resource. (e.g., "Technology makes my Professional work more difficult." "Using computers for learning takes students away from important instructional time. "). These items were taken from Kessler (2007, who "modeled the questionnaire after an instrument that was developed and evaluated in a series of subsequent studies (p.176)." The participants were asked to rate their level of agreement with the statements by choosing from 5-strongly agree to 1-strongly disagree.

The third section attempted to collect demographic information about the participants including items about their teaching and educational background, personal use of technology and also technological infrastructure in their school context. Except for the items about technological infrastructure, which were adapted from Hernandez-Ramos (2005), the other items were adapted from Lam (2000). The researcher scrutinized all of the items in these studies and eliminated some of the items which she did not find very relevant for the aims of this study.

In the last two sections, the teachers were asked to indicate their time preference for the live sessions and also invited to participate in the pre-study interview based on

their volunteerism. In order to see how effectively the questionnaire serves to collect data about the participants and check the content validity of the items, the researcher showed it to 2 experts in the field of foreign language education, who approved the items' convenience for the participants. The questionnaire was also filled in by 2 English teachers working at state schools who did not participate in the study. After getting consent from these teachers, who did not suggest any changes in any of the items, the researcher conducted the questionnaire with study participants. (See Appendix C for background questionnaire)

3.6.2 Interviews

Interviews are one of the most commonly used research methods in social sciences (Yıldırım & Şimşek, 2011) and most of the published work in qualitative studies employ interviews (Silverman, 2005). According to Kvale (1996), "the qualitative research interview attempts to understand the world from the subjects' point of view, to unfold the meaning of peoples' experiences, to uncover their lived world prior to scientific explanations" (p.1). This study also aims to delve into teachers' everyday practices, their experiences and preferences about technology use in their classes from the viewpoint of teachers themselves. The efficacy of the online training is also examined from the perspective of the teachers through interviews, which are very conducive for "exploring voices and experiences' (Byrne, 2004, p.182).

To gain insight into teachers' practices and experiences, pre- and post- study interviews were conducted. Pre-study interview was conducted in the first week of the training and post-study interview was done one week after the training ended. Pre-study interview aimed to uncover information about the teachers' practices of technology use in their classes, the factors affecting these practices and also their attitude towards Fatih project, which is a technology integration project being implemented at high schools in Turkey. The interview questions about Fatih project were prepared by the researcher and the other questions were adapted from Lam (2000). The researcher eliminated some of the interview questions of Lam, which she did not find necessary to include in the interview guide. Post study interview

investigated the teachers' perceptions about the online CALL training they received and attempted to find out the factors effective in the success of such an online training for other teachers similar to the study participants. These questions were also prepared by the researcher, who received expert opinions from 3 teacher educators for both of the interviews to check the validity of the questions. The interviews were made in Turkish in order to create a more natural and comfortable environment for the teachers and to enable them to express themselves more freely in their native language and later translated into English by the researcher. All of the interviews were audio recorded with the researchers' digital recorder, transcribed and later coded by the researcher.

For the interview type, semi-structured interview was preferred by the researcher since it is suitable for using when "the researcher is able to develop broad questions about the topic in advance but does not want to use ready-made response categories that would limit the depth and breadth of the respondent's story (Dörnyei, 2007, p.136). It was considered that this type of interview would yield more condense data, therefore impromptu questions were also asked during the interview, which gave the teachers ample chances to elaborate on their experiences in a more relaxed way, thereby providing more thorough insights and details about these experiences.

3.6.3 Blogs

In the first week of the training, the teachers were asked to create their own blogs as one of the weekly tasks and write a reflection report in these blogs from the first to the last week of the training. In the study, blogs were used as a data source in order to collect data on the teachers' beliefs about their chances to implement what they learnt in the training to their classroom contexts. Blog posts of the teachers, therefore, revealed important information about the transferability of the course content to language classrooms from the viewpoint of the teachers. These blog posts were also coded and analyzed by the researcher to come up with certain categories and themes.

3.6.4 Field/Observation notes

Field notes were also included to triangulate the data and to add the experiences and observations of the researcher during the different phases of the study. The researcher, who was one of the trainers at the same time, had many chances to observe the study participants on many occasions when they met for the interview, during the phone conversations and through an examination of their posts in Edmodo. Those problems and difficulties the teachers had during the training and communicated to the researcher in face-to-face meetings or phone conversations were also noted down and included as a source of data during the data analysis process.

3.7 Data analysis

For the analysis of data, the researcher conducted content analysis, which is a very common technique used in qualitative research. To identify recurrent themes, the researcher worked across the data set from the interviews and blog reports in tandem and grouped the recurrent instances into categories through a coding procedure (Wilkinson, 2004). To ensure internal validity, the transcribed interview data were sent to the participants by e-mail to allow them to make any amendments if necessary (Ersoy, 2013). The researcher received e-mails from three teachers and made the changes on the the data. For reliability, the coding procedure was carried out by two researchers who worked individually and later reexamined the codes by comparing and rearranging them into final categories.

3.7.1 The Researcher's role

The researcher, who was also one of the two trainers, held an emic role during the design and operation of the online CALL training. With an insider perspective, the researcher designed the training together with the other trainer taking the teachers' various needs and teaching contexts into consideration with an aim to get them to know basic CALL tools.

The researcher, though being the main body of information introducing new CALL tools in the online sessions, aimed at being one of the members of the learning community formed during the online training. She acted as a full participant in the training like the other participating teachers since the researcher's active role was important for forming a learning community that interacts and co-constructs knowledge and for a seamless online learning experience for the participating teachers. By selecting highly interactive weekly tasks and incorporating various synchronous and asynchronous communication tools, she encouraged the teachers to interact and communicate with each other. She also actively participated in the discussions held during the live sessions, the asynchronous discussions held in Edmodo, read the reflection reports written by the teachers, commented and posed questions to teachers not as a trainer but as a participating teacher interested in the teachers' teaching contexts and practices. The participative and insider role of the researcher did not harm the validity of the findings since the insider perspective was valuable and necessary for gaining insights about teachers' cognition, which was the main focus of the study.

Despite the afore-mentioned practices of the researcher to have an emic role in the study, the qualitative research is beset with the common threat of the researcher bias endangering the validity of the qualitative study (Johnson, 1997). To overcome this problem, the researcher drew on the following strategies for promoting trustworthiness.

3.7.2 Trustworthiness

One of the "quality criteria" for qualitative research is trustworthiness, which was introduced by Lincoln and Guba (1985) as a criteria corresponding to the validity in qualitative studies (Dörnyei, 2007). According to Lincoln and Guba (1985), there are four components of trustworthiness, which are credibility, transferability, dependability and confirmability. These components were addressed in the design of the training, data collection and analysis processes in the following ways:

Data collection and analysis techniques

The integrity of data collection methods and analysis techniques is worthwhile in any research initiative, not to mention the clarity of the procedures followed during these processes. For an elaborate explication of these procedures, data collection and analysis procedures and the syllabus of the training were explained in detail in the methodology section, which provided a case for the replication of the study and the online training CALL by other researchers.

In the design of the data collection instruments, validity checks were conducted by the researcher getting expert opinion on the items of the instruments and showing the items to a few Turkish EFL teachers other than the participating teachers as a small-scale piloting procedure. In the analysis stage of the interview data, the researcher first audio-taped and later transcribed the data. To get the participating teachers' feedback, she sent the transcripts to the teachers via e-mail and got responses from a few teachers who made some changes to the researcher's transcribed data. The interview data and reflection reports were also analyzed by two different coders, who first worked individually and later came together to reconcile on the categories.

Researcher's persistent observation

As described in the above section, in order to stand close to the participating teachers and form a learning community conducive for online learning, the researcher had an active participation in every learning activity during all phases of the training, which enabled her to test her assumptions regarding the participating teachers, their technological competence and their teaching practices. On many occasions, for example by observing the teachers and looking at their output in the live session, Edmodo, blogs and e-mails, the researcher collected rich body of information about the teachers. The researcher also kept an observation log, which most of the time provided rich source of information for the researcher and was especially beneficial in the explanation of her findings.

Setting the scene: a detailed description of the case

The researcher set the scene of the study lucidly by providing a detailed description of the context of the study. She provided background information about the teachers and provided extensive information about the design elements of the study, which can be considered as a viable means for the transferability of the study.

Triangulation

Triangulation is an important attribute for developing a more detailed understanding of a phenomenon through the inclusion of multiple data collection tools (Denzin & Lincoln, 2003). To this end, the researcher benefited from a variety of data collection tools such as background questionnaire, pre and post-interview and reflection reports.

CHAPTER 4

RESULTS

This chapter deals with the key findings concerning the participant teachers' technology use at schools, their views on Fatih Project, their perceptions about the online CALL training they received and the transferability of the knowledge and skills gained in the the training to the real language classroom. The findings for each research question are presented below.

4.1 Teachers' Technology Use in Their Classes

Four main categories emerged from the data concerning the use of technology by the participant English language teachers. These were (a) the technological tools teacher use (b) the language skills addressed via these tools (c) their stated reasons for using technology (d) the factors affecting teachers' technology use.

4.1.1 Technological Tools Used by Participant Teachers

When teachers were asked about the technological tools they used from the beginning of their teaching career up until now, they listed the following: the cassette player, cd/dvd player, MP3 player, overhead projector, projector, computer and scanner. Among these, the most recent and frequently used technological tools were the computer and projector. The computer was mainly used for Microsoft applications (e.g., Microsoft word, Microsoft PowerPoint) and having access to the internet to watch videos, films, listen to songs, access visuals, teaching materials and websites related to language teaching/learning. These tools were used by nearly all of the teachers except for two teachers who stated that they did not use technology in their current school due to the lack of technological infrastructure. Among the participant teachers, two of them said they used e-mail for collecting assignments. E-books were preferred by two teachers whereas only one teacher had a mention of a website to be used for classroom announcements. Similarly, another teacher used Facebook for this purpose and also for sharing links of websites related to language

learning. Those three teachers having Fatih project tools in their classes stated they used interactive white board (IWB). All of the teachers also stated that they somehow had to use technology due to the e-school system, which require them to upload grades for assignments and student projects on an online platform. Teachers expressed their technology use in the following ways:

> I use PowerPoint presentations. I download various videos and audios from internet. The other day, I got my students to watch videos of lawsuits in UK. There are some online TV channels. I collected a vast amount of materials from them about social issues. In accordance with my students' interests, I chose discussion topics for them. (Erin)

> For technology, I use videos. I use projector. There is a computer in the classroom. I project e-books on the screen. I prepare PowerPoint presentations. More visual, more fun. (Cemre)

> I first used cd/dvd players. Then the projector together with the computer. Nowadays, we have access to Fatih project tools and thus use IWB. I open our textbook on IWB (Mary)

> I collect the assignments through e-mail. I used to have a website before and I announced exam questions and results from that website in a scanned form. I also used it for class announcements. (Ahmet)

In addition to the above-mentioned tools, nearly all of the teachers stated that they always motivated their students to use technology especially the internet both inside and outside the class time. One of the teachers said that she asked her students with mobile phones to do web search about a topic and to find a video/ audio during the class time. For the same purpose, another teacher encouraged her students who owned tablets to use them in class. As an outside-the-class activity, most of the teachers recommended their students to visit some language learning websites and watch films and videos in English for improving their language skills. The following

excerpts display their motivation for enhancing the use of technology by their students.

> I try to have my students love and use technology as much as possible. I encourage them to use online activities when they go home. There are some websites. I recommend them to see these websites. (Cemre)

> In my classes where there are eager students, a few students prepared presentations and presented them to the whole class. I supported them by bringing my own laptop to the class. Other than this, I do not use technology myself in my lessons. (Nevin)

> I told my students to download dictionaries to their smart phones. I suggested them some websites. Before then, they saw us as human dictionaries and asked us every word. I tell them to look the words up in their e-dictionaries and they like that. They also have some problems with verb conjugations. They visit a website where there is a basketball game to practice these conjugations. (Gönül)

These teachers, though reporting to use the above-mentioned technological tools in their classes, revealed that their use of technology was quite random and the teachers were mostly ill-informed about the optimal ways of using technology. Their technology use was not a concomitant of a training which enables them to make informed decisions about technology use but hinged on their personal computer skills and ideas developed about technology.

> I use technology as far as I know, but in a random manner. I would really need a training for that to use it better. (Göknur)

> I think I use technology while teaching English. But I am not sure what you mean by technology. I am not an expert in that field. (Erin)

One of the teachers had even doubts about the veracity of using technology in her class and feared that it was a loss of time. These doubts mostly aroused from the technical difficulties she ran into while using technology.

> Finding an available computer. Difficult. If I find one, it may not work. Even if it does, sometimes I question whether I waste my time using technology. It weighs on my conscience. I hesitate whether I had better lecture or we do exercises rather than using the computer. (Nevin)

4.1.2 Language Skills Addressed via Technological Tools

Teachers indicated that among the four language skills, listening was the primary skill they focused on during their technology use whereas writing, reading and speaking were either not or partially addressed. Nearly all of the teachers mentioned using the internet for accessing listening materials such as videos, audios, films and songs. Access to authentic materials in which students can listen to native speakers was also an add-on advantage of the internet for these teachers. According to them, these listening materials also helped students improve their pronunciation. Teachers having Fatih Project tools in their classes used IWB to listen to audios and videos of the e-book.

Some teachers said that they made PowerPoint presentations to teach grammar. Culture was also mentioned by two teachers who stated that they used the internet to present cultural information about the English speaking countries. Speaking was addressed only indirectly by teachers who found topics or videos from internet to have a whole class discussion afterwards. No teacher mentioned using any technological tools for teaching reading and writing. Some comments from the teachers are as follows:

> I use internet primarily for listening. Other than that most of my students did not know where Dublin is, Ireland is. I showed them some visuals from the internet because English lesson is not all about grammar. Before that, I used

> cassette players, [and] videos. I used to use textbooks' cds and films, cd/dvd players. For listening activities, I use MP3 player sometimes. (Gönül)
>
> I used to bring a tape player to class before, now I use a laptop. Generally, I have my students listen to songs. If there is a projector, I project the lyrics. There are two technologies I use: computer and projector. I get my students to watch videos I found from the internet. I project visuals from the internet. It takes their attention more. We sometimes watch films. They like it. (Göknur)

Teachers revealed to capitalize on technological tools, mainly computers, to have access to teaching materials, especially to listening materials (e.g., videos, films, etc.). Oftentimes, they did not have prior planning to teach language skills via technology and design any activities or tasks while using technology to address these skills. Rather, they used these tools in an ad hoc manner, for instance when they wanted their students to focus on the pronunciation of some words as they come up or do some listening, which does not require them to do anything before or after the listening. These can be seen in the following comments:

> Technology is beneficial, especially for us since it corrects our pronunciation mistakes. The other day, one student mispronounced [the word] Monday. I had IWB pronounce the word. It was good. It teaches pronunciation better than I do. (Mary)
>
> We are discussing a topic in the class. Their mobile phones come to my mind sometimes. I tell them they can use their mobile phones to do web search about the topic we are discussing. (Gönül)

Teacher comments showed that teachers' use of CALL tools was motivated from a behavioral approach to CALL (Kern & Warschauer, 2000). The teachers used the computer mainly for drills, fill-in-the-gaps exercises and computer-to-human interaction as shown in one of the teachers' expression below:

> I use the computer, get my students to listen to songs from the internet and do the fill-in-the gaps exercise. That is all I do with the computer. (Nevin)

4.1.3 Factors Affecting Teachers' Technology Use

Teachers pinpointed many factors as affecting their technology use in their classrooms. These were related to technological infrastructure, issues related to MoNE, opportunities for professional development, attitude towards technology and technological developments in general and the school environment.

Technological infrastructure was a major problem for nearly all of the teachers. Two teachers had no computers in any of their classes which rendered it impossible for them to use any technology in their classes. Other teachers had a computer not in all, but in some classes, some of which did not work. To solve this problem, some of the teachers brought their own computers to the classroom. Only some of the classes were equipped with projectors. A few teachers had computer labs at their school but the computers were not adequate in number and not all of them functioned properly. Another big problem was related to the internet in that three of the teachers did not have the internet at their school whereas other teachers complained that internet was gone many times during the lesson time. A few said it was too slow for the lesson to flow without any loss of time. All of these factors prevented the teachers from designing technology integrated lessons in each of their classes. They also could not address language skills as much as they wanted due to these shortcomings. The teachers highlighted how negatively the lack of technological equipments affected their technology use as below:

> There is no computer in the classroom. I bring my own laptop sometimes. There is no projector, either. I use technology only if I have it. (Nevin)

> I wish we had a computer in each class or each teacher had their own computers. We used to have a TV, cassette player before. Back then, we had more access to technology than now. I wish a computer lab could be established. At least, we would do some listening exercises. We can watch films. But we have none of these and it seems that we will never have. (Sevil)

> Internet connection is too bad in the classes. So slow and limited. This prevents me from using the computer on a regular and frequent basis. (Ahmet)

> There is a projection only in a limited number of classes. Some colleagues change their classes to use projectors. The physical infrastructure of the school is not enough. For example, there is a computer for each student in the computer lab. There are fifteen computers and I have thirty six students. (Göknur)

In a similar vein, two of the teachers having the Fatih project tools in their classrooms complained about the lack of tablets in their classrooms while the remaining teacher pointed at the lack of internet connection at her school. Despite being the components of the project, tablets and internet connection were lacking in teachers' classes, which prevented teachers from exploiting the affordances of these for teaching purposes. As a result, one of the teachers expressed her preference for a computer with internet connection to an IWB without internet connection as she indicated below:

> There is no internet connection in the classes. MoNE does not seem to approve the use of smart board with internet. I prefer a computer with internet to a smart board without internet. It totally inhibits my teaching activities. (Mary)

Many teachers complained about the technical problems they encountered while using technological tools, which was a common problem for both those teachers having the Fatih project tools and for those who do not. They accentuated that they were in need of technical support at these times and this support was not available. This affected their reliance on technology as an instructional tool in a negative way. Some teachers mentioned they relied on their students to deal with these problems. Some said that they got help from computer teachers. Teachers' overall comments

revealed that they were not provided with technical support on a regular basis as seen below.

> When there is a technical problem I cannot cope with, I ask my students for help. They are much better than me at these technical things. (Göknur)
>
> The loudspeaker does not work sometimes. Sometimes, internet connection is gone. Sometimes, the computer breaks down. I cannot handle any of these. Thus, I do not have any lesson built completely on computer. (Gönül)
>
> When there is a problem with the smart board, it takes a few days for the problem to be solved. Sometimes computer teachers are dealing with the problem. But not every time. Sometimes, they do not deal with the problem at all. We are waiting the problem to be solved because we are not competent at using the smart board. (Mary)

Teachers referred to some issues related to MoNE as affecting their technology use in a negative way. According to the teachers, the curriculum was too heavy and lesson time, which was reduced recently by MoNE was not enough to integrate technology into their lessons. As regards the role of curriculum in technology integration, one of the teachers stated the following:

> The curriculum is too heavy. Lesson hours were reduced and not enough. I am doing the lesson in a hurry and not able to use technology as much as I want. (Cemre)

Another problem raised by the teachers were pertinent to the inadequacy of the textbooks provided by MoNE. The teachers indicated that the textbooks were not technology friendly and did not involve any technological supplementary materials. This resulted in a need for teachers to choose their own materials but this was also not possible as MoNE required teachers to use their textbook, which was not a procedure before as stated below by teachers.

> Textbooks provided by MoNE do not have any cds, not enough materials. We are trying to supplement the book. (Mary)

> Ten, fifteen years ago, we had more technology. We had books, a lot of materials. We could have our students buy very good books. CD, cassettes, video lessons. Technology regressed, did not improve. MoNE affects us negatively. We used to use CDs, TV, books with video, audio, CDs. We had very nice lessons. We were free in choosing our materials. We could choose different books for each language skill. But now, MoNE books are enforced on us. We do not have any supplementary materials. We have to use MoNE books. English lessons detoriated. (Nevin)

Regarding MoNE textbooks, teachers stressed that the books were not within the scope of the students' areas of interest and failed to engage them in the lesson. The unit topics of the textbooks were very similar to the topics of the textbook they used at primary school textbooks, therefore being of little interest to the students. As a result, teachers had to find supplementary materials from the internet to attract their students' attention as noted by one of the teachers below:

> My students say that when they come to high school, the textbook is too simple. They say they have already had these topics. It seems that the writers of the primary and secondary school textbooks are different people and do not communicate with each other. My students are not interested in the book. The topics of the units are the same or very similar. MoNE books are not successful on its own. The writers could not grab students' attention with these books. My students do not want these books. They are so ordinary. But I am a teacher who loves facts and follows daily life agenda. I use supplementary materials. Ones compatible with computer. (Gönül)

Another point highlighted by the teachers was related to the importance of exam grades for students 'university entrance, which led teachers to postpone using technology for the sake of students' success in these exams. The exam- focused

nature of the Turkish educational system and the high value given to tests prevented teachers from using technology effectively for the development of their students' language skills as two teachers commented below:

> We have Fatih Project tools but we are dealing with very nonsense things. As a teacher, I am not improving but getting worse. Exam scores are very important. Having the same exam in all of the sections is a must. Teaching something the same way in all of the classes is something enforced on us. But this is not possible. Every class is different. I should be given freedom to decide on how to teach in each of my classes and evaluate my students' progress. (Erin)

> We have to apply the same exams in every class nowadays. Exam grades are so important for the students. After I cover the content for these exams, I can design lessons with technology. (Cemre)

One significant factor affecting teachers' use of technology was teachers' perceived computer skills and knowledge to use it effectively to teach English via technology. Nearly all of the teachers stated that they did not feel themselves competent using technology and were in need of an in-service training that would equip them with the skills to use it for instructional purposes. According to the teachers, such training will help some teachers overcome their barriers to use technology, as a few noted below:

> Every teacher is not equally computer literate. But it is an important issue. Some teachers lag behind. There should be in-service training. If the number of training courses increase in number, teachers' fear of technology will decrease, I believe. Especially the experienced teachers are afraid of technology and this prevents a unity at schools in terms of using technology. (Mary)

> I would really like to have a training. I want to know how to use the computer, prepare presentations, exam questions on the computer. (Sevil)

When teachers were asked about how they learn about new technological tools and perpetuate their professional development, nearly all of them revealed to rely on web search and their own efforts without any support provided. As different from other teachers, teachers working at vocational schools stated that they were given computer courses at their schools, which were helpful for the development of their computer skills.

> Short-term computer courses at our school improved me a lot. I read from the internet, too. (Gönül)
>
> I sustain my professional development myself by keeping track of the new developments with a deep interest and doing web search. (Ahmet)
>
> On my own. I improve myself as far as I do something myself. There is not such a support. I only search things in the internet. Sometimes, I get help from my daughter. (Nevin)
>
> The factor of utmost importance as affecting my technology use is related to me. I do not know technology well. I try to improve myself via internet. I look at English teaching websites. I scrutinize what other teachers are doing. At school, I try to be in contact with my colleagues. (Göknur)

Two teachers complained that even if there are some computer courses provided by MoNE, these focused mainly on computer skills and did not teach techno-pedagogic skills. Therefore, although teachers had some knowledge about using the computer, they were not informed about how to use it for teaching English, especially for the development of some language skills. Teachers also indicated their need to have more practice in these training courses as commented by teachers below:

> Before, when I first started teaching, the textbook publishers gave us trainings on how to use technology every year. They illustrated us how to use cds/ DVDs for listening, etc. They talked to us about how they apply technology in their own classrooms. They were wonderful. But these trainings are not available for a long time. MoNE courses do not exemplify

> how to use computer for teaching English. They are simply courses for gaining basic computer skills. (Gönül)
>
> The in-service trainings of MoNE are not adequate. Time is limited. It leaves many things to home. But you need to apply the things. They should increase the practice side. (Mary)

Along the same lines, the teachers having the Fatih project tools in their classes referred to the lack of focus on practice in the training and too much emphasis on the technical side, which stood as a barrier to teachers' learning how to use the project tools for developing materials and teaching language skills.

> We do not have much experience in using the tools. We are not competent at preparing visual materials to be presented in the smart board. We need to spend more time. The training was not very beneficial. They did not allocate much time for doing practice with the tools. Practice side was not emphasized. Time is not enough to learn how to apply these tools in your class. (Mary)
>
> I believe the smart board is especially beneficial for pronunciation. It corrects pronunciation mistakes. I get my students to listen to the smart board when they have difficulty in pronouncing some words. We listen to the reading texts and have a whole class discussion afterwards. Bur I do not see any other value of the smart board for reading, writing and speaking. We were not taught about these in the training. (Mary)

A few teachers mentioned that they were wary about showing a presence in social platforms (e.g., Facebook, blogs, etc.) and using these platforms for instructional purposes since they did not feel themselves well- informed about safe internet usage. They showed a need for learning how to use the internet in a safe manner to feel themselves more comfortable for integrating social platforms into their lessons. They also stated that they could not share materials from the internet freely since

they did not know about copy right issues, which also prevented them from using sources from the internet, as teachers expressed below:

> I have a Facebook account. But I have doubts about whether I should use it with my students. I am afraid of some hackers and I am anxious that they can control my posts there. (Gönül)

> I want to share some pictures or videos from the internet with my students, for instance, in a blog. But I am not sure about the copy right issues. Is it something allowed? Would I encounter any problems if I share these things? (Mary)

Two of the teachers indicated the importance of technology exposure during pre-service education. They stated that their use of technology at university enabled them to be competent users of technology and be able to continue their professional development on their own, as one teacher noted:

> I first met with technology during my pre-service teacher education program. Later, I was able to sustain my professional development myself. I did not receive any professional training. (Erin)

> I feel myself able to use technology. The reason is I have been using it since university time. I always used computer to do my assignments, for having presentations. So no problem. I can use the computer in my classes with ease. (Cemre)

A supporting school environment was pinpointed by teachers as a sin qua non for technology use in their classes. Nearly half of the teachers stated that the negative attitude of the administrators and some teachers towards the use of technology and the varying levels of technological competence among teachers impeded their technology use. Due to this negative attitude, they were not able to have access to some technological tools on a regular basis and got demotivated to integrate technology into their classes. These can be seen in the following comments:

> I want to use technology. But there are things you need to do to reach common aims at school. Thus, you cannot use technology as much as you want. But still, I am trying to use. Some teachers say I teach this way, I do not use technology. I need to take decisions together with these teachers, who know nothing about technology. They do not approve what I am doing. They focus on grammar. I like focusing on communication skills and using technology. They expect same things in each class. This is mainly due to the administrator's attitude. (Erin)

> The way the administrators look at internet is wrong. When there is a negative thing in one classroom, they block the internet in all of the classes. Teachers are also prejudiced. Some administrators do not allow us to use the computer lab in case the equipments break down. (Ahmet)

One of the teachers even reported to abandon some of her technology using practices as a concomitant of reactions from her colleagues. She stated the following:

> My students needed help for pronunciation. Therefore, we were watching films. I got some reactions from other teachers. They argued that watching films was wasting the lesson time. Since then, we have not watched films. (Göknur)

Two teachers mentioned that they had a positive school environment which supported technology use whereas the remaining teachers said that they had neither any support nor objection from the administration concerning technology use:

> They support us. If a new technological tool comes to school, they give it to us. (Cemre)

> They are neutral, I believe. They do not do anything or when I use technology, I do not get any comments from them. (Nevin)

A few of the teachers stressed the importance of a school-wise technology planning and successful cooperation among teachers for the preservation of technological tools and promoting their regular use by the teachers in a programmed manner. They highlighted that the technological facilities should be kept in order and there should be time allocated for the use of these facilities by every teacher, as expressed below:

> The computer lab is so dirty. It is not usable. Teachers also do not know when they can use the lab. We should arrange which teacher will use the lab when. (Ahmet)

Some teachers' comments revealed that technology use was also greatly influenced by the type of school they work and its student profile. These teachers working at vocational high schools noted that they could not use technology in their classes or even teach their students since these students were very unwilling to learn in general and were not interested in English lessons. They, therefore, were not convinced about the potential benefits of using technological tools in these classes as shown below:

> The students have a very low proficiency in English. They do not have any eagerness to learn anything. They even find it difficult to write their name and surname. I am not sure if my trials to use technology will worth the effort. (Sevil)

All of the participant teachers indicated that they had a positive attitude towards technology and technological developments in general. They supported the use of technology for teaching foreign languages, which motivated them to infuse it into their classes. Prior experience of technology was also another factor promoting use of technology as teachers stated below:

> I am a person who loves technology. Also computer. I always used technology before my colleagues. While they were using overhead projector, I was using projector. I have always used technology. (Erin)

> Technology is something familiar to me. I have always been close to technology, also in my daily life. I surf in the internet. I google things. It is, therefore, not hard to use these in my classes (Gönül)

4.1.4 Reasons for Using Technology

Teachers' comments revealed that one of the major reasons for their technology use was due to its practicality and time-saving function. Since it saved time and energy, teachers preferred technological tools over traditional teaching materials. They also believed that these tools created better learning environments for their students as expressed by these teachers below:

> I scan the grammar book and project it on the screen, the e-books. No need to write on the board. I also project the answer key on the PowerPoint presentation. I save time this way. (Cemre)

> Technology facilitates both students' and teachers' work. It creates an interactive learning environment. I think you learn better via internet, more interesting. You can also give prompt feedback to your students. (Mary)

Similarly, all of the three teachers having the Fatih project tools in their classes reported to benefit from the practicality offered by the project tools as one of the teachers explains below:

> With the smart board, I do not need to write anything on the board. I can see the book on the screen. We can also see the answer key. No need to carry a tape for listening activities. You can draw pictures, write on the smart board, open your documents. Less work for me. (Mary)

Teachers emphasized the significant role of technology in teaching English and believed that it was of utmost value since it helped develop their students' language skills. According to these teachers, technology provided access to authentic teaching materials (e.g., visuals, audios, etc.), native speakers and other English speaking

people and also bolstered their students' self-confidence about learning English as indicated below:

> I think that technology plays a vital role in language education. For the development of four language skills. Listening materials, visuals are all within the scope of technology. Social media is also very commonly used nowadays. (Gönül)

> Using technology is very important. We are not native speakers. When the students hear other speakers of English, their self-confidence about English increase. When they hear African, Indian, German people speaking English, they think they can also speak English just as others do. What else can enable this? Listening to a real speaker, watching a talk show, short videos, films. (Erin)

One of the teachers highlighted that using technology in her classes provided her students with a real reason to learn English. Thanks to technology, her students saw its use in daily life, realized the value of learning English and as a result, became more motivated to learn it as a teacher commented:

> I attract my students who do not like English with technology. I tell them that English will help them to play the games, use the computer, and many things. Their interest in English increase when they see the benefits of learning English for their lives. With technology, I develop an awareness of the importance of English and show them that it is something used in real life. (Gönül)

Nearly all of the teachers stated that their students had a deep interest in technology in their daily lives. They also possessed many technological tools and were very competent at using these tools. In order to take their students' interest in the lesson, teachers reported to resort to using technology as two teachers commented below:

> Our students have access to every technology. Smart phones, tablets. They are also using them very competently. We should supplement our lessons with more visuals and technologies our students like using. (Nevin)

> Students like smart board. For example, it is more interesting to see a zoomed image on the smart board than a picture I bring to the classroom. Same for videos. I use technology because my students have an immense interest in technology. Pen and pencil do not mean anything to them. We should integrate technology somehow into our lessons. (Mary)

4.2 Teachers' Perceptions of the Online CALL training

The analysis of data revealed three main categories regarding teachers' perceptions of the online CALL training. These categories were (a) success factors in an online CALL training (b) participant teachers' stated contributions of the training (c) their suggestions for improvement of the training.

4.2.1 Success Factors in an Online CALL Training

Upon an analysis of the interview data, the researcher identified two factors as necessary for the success of an online CALL training. These factors were related to (a) participant characteristics (b) design elements of the training.

4.2.1.1 Participant Characteristics

Nearly all of the teachers stated that they faced many difficulties during the training and as a result, planned to leave the training especially in the first week. According to these teachers, they ran into these difficulties since they were not competent at using the computer as they expressed below:

> I had many difficulties. These difficulties were mostly due to my computer skills. I am not good at using the computer. The training sessions were so challenging for me. In the first session, I used two computers at the same time. I copied the links you gave in the chat board to the other computer. As time passed I learnt there was no need for this. I got help from my daughter.

> She was with me during the training sessions. I could also do the tasks with her help. (Sevil)
>
> The first session was the worst. You shared your screen on WizIQ and I could not write on the chat board. That moment, I thought I should leave the training. The training was above my level. I got help from my husband. I could not do some of the tasks on my own. I need to spend so much time and energy. I also phoned Sevil when I could not manage things during the training. (Nevin)

Two of the teachers indicated that typing speed affected their success in the online training. Due to the slowness of their typing, they faced some problems as one teacher noted below:

> I type very slowly so I could not catch you most of the time. I was slow. For those who use computer frequently, no problem. But for those like me, who is not good at using the computer, it is difficult to follow the lesson. (Fatma)

Most of the teachers pinpointed the importance of having prior experiences in using computer in order to be successful in an online training. Teachers who stated that they always used computer did not have any problems during the training as two teachers highlighted below:

> I think it is important to be close to computer to be successful at a training like this. Personally, I have always used computer. When I worked at a private institution, I was in charge of a tool similar to smart boards. I use computer for everything. For preparing exam questions, creating a data bank as a compilation of questions. I like these kinds of things. If you do not use or know such things, this training would be hard. (Ahmet)
>
> I have been using Word, PowerPoint. I also used computer a lot when I was a student at university. I always did my assignments on computer. So I did not have any difficulties during the training. Conversely, I liked it very much and want to participate in such online training. (Cemre)

Teachers who did not have any experience of using technology in their classes before mentioned that the training was above their level since even the concept of using technology was new to them as two teachers noted below:

> In the beginning, I did not feel myself ready for the training. I did not think I would be able to complete the training successfully. It is mostly because I am not familiar with technology. I have never used it in my classes. (Sevil)

> While we were at the level of learning the letters, we tried to write a composition. We are working at a vocational school. The other teachers were already using technology in their classes, at least they were familiar. But we are in a different position. We do not use any technology in our classes. We do not have any technological infrastructure for that. Even the idea of using technology is utopian. (Nevin)

Some of the teachers indicated that they used internet on a frequent basis and this enabled them to cope with the difficulties more easily and complete the training successfully.

> At first, everything was so new to me. I felt very nervous. But I thought that I am familiar with these things. I use internet. If I am capable of using internet, I should be able to use these things, as well. But if I were not familiar with internet, this stuff would be hard. (Fatma)

> I have been an internet user for years. I always google things when I want to learn about something. I think this was a great advantage for me. If I did not use internet frequently I would not be capable of using WizIQ or Edmodo, I think. (Cemre)

One of the teachers commented that having prior experience in using asynchronous and synchronous tools also played a role in the success of an online training as she noted below:

> I did not use something online before. Even chat was new to me. If I had more experience with chat, for instance, I would not have any problems during the live session. (Nevin)

Nearly all of the teachers indicated that they were more familiar with face-to-face medium and preferred this method over the online medium since they did not have prior experience with online learning environments. They also believed that a face-to-face training would be more conducive to their learning needs as two teachers noted below:

> I am more familiar with face-to-face method. It is more intimate. Even eye contact is important. It feels like you can ask more questions when the trainer is next to you. In the online platform, you type, click enter, and wait. I feel stressed in case you would not see what I write. When you are together, I can interfere quickly and ask whatever I want. (Sevil)

> If the training were face-to-face, the trainer would help more. He/she walks through the classroom and helps. He/she shows the shortcuts. When it is online, you do not understand something and asking about it is not easy. (Fatma)

A teacher who had prior experience of taking an online course said that she did not have much difficulty in the training and felt herself competent to receive online trainings in the future in contrary to another teacher who felt overwhelmed as it was her first online experience as expressed below:

> I participated in an online course before. For this reason, this training was not challenging for me. I have not used WizIQ or Edmodo before. But they were quite similar to what we did in the online training. I can participate in an online training in the future, too. It is not hard for me. (Cemre)

> When you are having your first online experience, you feel overwhelmed. If I were familiar with this method, I would not feel that much unprepared. In the second time, I am sure I will feel myself more competent. (Nevin)

Being informed about online education and believing in its merits were also important for the success of teachers in the online training as stated by two teachers below:

> I am also quite familiar with online mode. A few of my friends took distance courses. From these friends, I saw what kind of a system online learning was. Maybe because of this, I did not have any problems with the online training. (Ahmet)

> I have read a lot about online education. Some parts of the world already use it. I believe in the future teachers will be lecturing online from their home. It will be the new form of education. (Cemre)

4.2.1.2 Design Elements of the Training

A few teachers stated that they preferred asking their questions directly to the trainers rather than sharing them in Edmodo with other teachers. Asking other teacher participants was not as comfortable as asking to the trainers as two teachers expressed below:

> I did not share any of the problems I encountered in Edmodo. I did not want other teachers to think that I could not do and I was bad. Rather, I preferred contacting you directly. I phoned you. It is more relaxing for me to ask the trainer. (Nevin)

> I had my husband with me during the training. If I did not have him, maybe I would share my problems in Edmodo. But it is hard to reveal that I am not able to do in front of others. So I couldn't write about my problems there. (Göknur)

A few teachers stressed that an online CALL course should be situated in teachers' classroom contexts and get them to apply technological tools they learn in the training in their own classes. They highlighted that such an immediate application would allow them to have a first- hand experience of the tools, see real life problems

and discuss about possible solutions for these problems with the trainers and other participant teachers as they noted below:

> A training like this should involve applications in our classes. If there is no immediate application in a classroom, you do not develop the competence to use it in your classes on your own. It would be better if we applied these in our classes in your guidance and talked about how it went. This way, we would share the problems we encountered. You learn such things as you apply. (Sevil)

> Most of us could not apply these new things in our classes. There was not enough time for that. This is bad. If we applied, we would have more things to talk about and really learn about these tools. (Melek)

All of the teachers pointed out that timing was one of the biggest problems concerning the design of the training. They mentioned that during the time of the training, they had heavy workload at school and this prevented them from having the full benefit of the training as explicated below:

> I wish the training would be at a time when I was totally free. This way, I could give my concentration on the training fully. During the training period, we were so busy at school. It was the end of school and we were dealing with lots of things. If my only duty were to participate in the training, I would not be in a hurry and would study more. (Fatma)

> Because it was the last month before the winter break, we were so busy with many things at school. I could not spend as much time as I wanted on the training. (Cemre)

Two of the teachers mentioned having problems related to internet connection and highlighted the need for a strong internet connectivity for the smooth run of the training as they expressed below:

> My internet was so slow. It dropped off many times. This prevented me from following the lessons fully. I missed some of the things. (Fatma)
>
> Internet connection was a problem. Sometimes it was so slow and other times it dropped off very often. These times, I panicked. (Fatma)

Nearly all of the teachers indicated that the instructions and feedback of the trainers were very beneficial for their success in the online training. Having a good rapport with the trainers was also a factor that motivated them to complete the training as two teachers noted below:

> Our dialogue with you. We had a very good communication with you. Your instructions were very clear. We completed all of the steps with you. Your attitude towards us was very good. (Cemre)
>
> I did not leave the training mainly because of you. Motivation is so important. All of the steps in the live sessions were very clear. I was very satisfied with your guidance and direction. Your feedback during and after the sessions was very helpful. You made comments when we completed the tasks and shared them on Edmodo. Your voice tone, the way you get us to interact, all of these were very nice. (Melek)

Three of the teachers highlighted that familiarity with communications tools of the training was necessary for using these platforms seamlessly. These teachers said that due to the lack of knowledge of the platforms, they got stressed and encountered many difficulties as they commented below:

> At the beginning of the training, we were not familiar with Edmodo or WizIQ. In Wiki page, you said Edmodo was similar to Facebook so it was a clue and I had some idea about Edmodo. But WizIQ, it was totally new to me and I could not imagine how it was like. If I were more familiar with these tools before the training started, I would not got into a panic. (Nevin)

> In the first weeks, I clicked wrong buttons. I could not find back button and clicked cross button. Thus, I was out of the session. I needed to enter the sessions again and again. (Melek)

> I think as the first step, you should get to know the learning environment. Because I did not know these platforms, I was so afraid of doing something wrong. First, you should see some examples and an introduction about these platforms. If not, it is so frightening. A session on how to use these platforms is necessary. (Sevil)

As another factor affecting the success of an online training, one of the teachers pinpointed that the programs that computers should be equipped with should be determined and announced to teachers before the training started. According to this teacher, such a precaution would prevent the participant teachers from losing time in extracurricular activities as he expressed below:

> When we started the first session on WizIQ, my computer did not have some programs. I needed to download these programs. This slowed me down and I missed a few things you mentioned during the session. I also did not know we needed microphone at first. If I were notified of these before, I would not waste a lot of time trying to fix all these during the training time. (Ahmet)

When teachers were asked about the things they liked about the training, some of them indicated that e-mails that were sent each week as a checklist for weekly tasks were very beneficial and helped them stay on task as one of the teachers expressed below:

> Before the sessions, you sent us an e-mail about the weekly content and tasks. This motivated me a lot. It also reminded me of the things I forgot. (Fatma)

Some of the teachers appreciated the flexibility provided by the trainers in the choice of some tasks and the deadlines as one teacher elucidated below:

> You gave the deadline of the blog reports by consulting us. It was nice to have flexibility. You also made some tasks optional. It was good because it was not possible for me to do these tasks in my classroom. You also gave options for week four tasks. I chose what I liked. (Cemre)

A few of the teachers said that they benefited greatly from communicating with the trainers via telephone and preferred this way of communication to e-mail as shown below:

> It was great to reach you via telephone. I am so happy that you gave us your telephone number. If we did not have your number and communicate only via e-mail, I would not be so relaxed. Phone numbers should definitely be shared in such training. (Nevin)

> I did not send you any e-mail during the training since I did not need to. Otherwise, I like sending e-mails. No problem. In such a training, it is the best way to communicate, I think. (Ahmet)

4.2.2 Contributions of the Training

All of the participant teachers pinpointed many benefits of the training for the development of their skills and knowledge on using technology. One of the many benefits of the training was learning a variety of new technological tools that can be used in language classes. Nearly all of the teachers indicated that thanks to the training, they got familiar with cutting-edge technologies and got confidence about integrating them into their classes as two teachers explicated below:

> I learnt a lot of things I did not know before. Creating a blog. Writing in the blog. Google hangout, digitalstory. I created my own digital story. I know WizIQ, Edmodo. I know digitalstory. I am familiar with all of these. When I am with other teachers, I can say I know these. I developed some ideas about what I can use in my classes. (Nevin)

> While learning new tools in the training, a lot of ideas popped up in my mind. For example, I can create a class blog. My students can watch a film at home and write a critique of the film in the class blog. Other students can comment on these critiques. They can publish their poems, videos or something they write. We can also create a school website to give announcements, to exhibit students' work, etc. (Cemre)

Many of the teachers posited that writing blog reports was a beneficial activity since it created opportunities for reflection, evaluation of the learning processes and interaction with other teachers. One of the teachers also stated that she got more competent at using the blog thanks to the blog writing activity:

> I learnt how to create and use a blog. While I was writing my blog report, I made a summary of what I learnt from which activities and how I can apply these in my classroom. I thought about these in detail. The questions you gave us were very informative and facilitative. They helped me concentrate on what I learnt and what I can apply in my classes. (Göknur)

> Thanks to blog reports, I saw what other teachers were and were not able to do in their contexts, what kinds of problems they had with their students or the things they could do well. It provided opportunities for interaction in this respect. (Sevil)

One of the teachers indicated that giving similar questions for each blog writing activity was boring and demotivated her to write the blog report as she explained below:

> I did not write any blog report. I did not have any time for that. Also, there were nearly same questions each week, which was very monotonous. I needed to write the same things over and over again. As it was an additional work, I did not prefer doing it. (Melek)

Despite their familiarity with face-to-face medium, many teachers posited that this training enabled them to get rid of their prejudice against online learning. They said

that thanks to this online training, they developed self-competence about being successful at future online courses as they expressed below:

> Although I still prefer a face-to-face training, I can say I dispelled the prejudice that I cannot do well in an online training. I now have the self-confidence to participate in future online courses and trainings. (Nevin)

> At first, I never thought I would be successful at an online course. But as time passed, I really got familiar with this mode and I saw that I was able to do. This made me so happy. I believe I can attend other online courses. (Fatma)

Most of the teachers indicated that the online CALL training showed them the importance of using new technologies for teaching English and motivated them to sustain their professional development in this area. One of the teachers even stated that she felt herself competent at developing herself on her own as shown below:

> After this training, I have realized that I can continue my professional development via internet on my own without attending any MA classes. (Göknur)

> This training motivated me to sustain my professional development on technology. I now feel myself more ambitious in this respect. It brought new projects to my mind. It broadened my horizon. I plan to learn more about these and attend such training. (Cemre)

> Thanks to this training, I have realized that I should spend more time on my professional development and this was my responsibility. The training gave me ideas on how I can do this. I have even searched for other online courses and found a few. I will attend some of them from now on. (Fatma)

Some of the teachers showed that they started looking for other ways to improve on their knowledge and skills in technology use even during the training as two teachers commented below:

> The training was very beneficial for me. After this one, I attended two other online courses. (Göknur)

> This training gave me the confidence to search things on my own. During the training, I visited many websites, blogs related to language teachers and learners which you introduced us in the live session and many other blogs. I scrutinized these blogs in detail. I looked at the ways they are written. I found many new websites about language teaching. I visited British council's website and saw that they organized a contest on blog writing for teachers all over the world. I read the blogs and realized how similar ideas I had with these teachers. This training was an important step for my professional development. I want to attend such seminars from now on. (Fatma)

One of the teachers mentioned that she started to understand her students better who prefer using technological tools to pen and pencil in class since some of her beliefs concerning technology use changed thanks to the training as she commented below:

> My students always took pictures of the board with their mobile phones and did not want to write them on their notebooks and I got so angry at these times. But now I understand them. Last year, I used to collect their phones but now I allow them to use them to take pictures. (Göknur)

4.2.3 Suggestions for Improvement

One of the participant teachers who was the head of the English department at his school stated that he tried to convince his colleagues to attend the training but could not be successful at these attempts. He argued that some teachers had prejudices against technology and should first be convinced of the value and importance of using technology in language classes as an initial step for enabling them to develop positive ideas about technology before receiving any CALL training as he explained below:

> In order to reach every English teacher and enable them to use technology, we should first convince them of the value and importance of technology.

> They should believe in its benefits. Some colleagues do not even use cell phones. You tell them to use something they have never used before. They are so far away from technology. Before a training starts, they should find answers for their questions about technology. (Ahmet)

Teachers who encountered many difficulties during the training indicated that these difficulties were mainly due to their computer proficiency, which was not adequate for being successful at an online CALL training. To this end, they suggested that teachers who are devoid of basic computer skills should first take a face-to-face or blended CALL training as they commented below:

> This training should not be fully online. It should have some face-to-face component. We will gather in a classroom with our laptops and learn about these tools. The steps of creating a blog, for instance, will be shown. At home, we will have an online session and have an application of what we learnt in the classroom. If I were more proficient at using computer, it could be online without any face-to-face lesson. But my computer skills are not enough for a fully online course. (Nevin)

> I would prefer that such training is face-to-face rather than online. If I were better at computer, there would not be any problem with the training being online or face-to-face. (Sevil)

One of the teachers emphasized that there is a need for taking a course on basic computer skills before participating in a CALL training regardless of its being face-to-face or online as she stated below:

> Maybe, first of all, I should take a course on basic computer skills. I took such a course before but I guess it is not enough. I am not equipped with the skills to attend an online training. But even if the training were face-to-face, I would still need to learn the basics of computer first. (Sevil)

Some of the teachers who said to have difficult times during the training due to the lack of computer proficiency suggested that such an online CALL training that is

voluntary should inform the teachers about the computer skills required for the training at the outset and thus involve teachers equally computer proficient in the training as two teachers highlighted below:

> This is not a shortcoming but only a suggestion. Before the training started, maybe you could have warned us that the training required some level of computer proficiency. Of course, some people could follow the lessons. But people like me had difficulties. If I had known that my computer skills are not enough, I would not have participated. I think skill levels required for this training should be explicated and only those having these skills should participate. (Nevin)

> There was a teacher. Ahmet. He said I have been using this tool for years. I know this and that. This demoralized me so much. Whenever he said something, I got stressed. If we were at an equal level, I would not be so disturbed by him. But while I am not even competent at using the computer, he was talking about very high level things. (Sevil)

A few teachers asserted that in order to cope with the difficulties of the online training more easily, teachers can be put into groups with people they like working with and get help from each other during the training. They argued that such a grouping would help them learn better, interact more and get rid of stress as shown below:

> In a training like this, teachers can get into groups with teachers they want to work with and thus share their problems within this group more easily. For instance, during the live sessions in WizIQ, I always phoned my friend to ask about something I missed. I feel myself more relieved when there are people I know in the training to whom I can contact in case of emergencies. We have a good rapport and share a lot. If we worked together, we would not be under a lot of stress. (Nevin)

> I think I would feel myself more relieved if I had a friend who is technologically more capable than me and we worked together during the training. At first, one of my friends, who is good at computer was going to attend the training and I was so happy. But later he could not attend so I was under a lot of stress in the live sessions. If we had a chance to work with peers who can help us, it would be great. (Melek)

Many teachers stressed that participant teachers came from different levels of schools with different student profiles, which affected the level of interaction and sharing among these teachers. Since they had different teaching contexts, their application of the training tools also varied drastically. As a remedy for this problem, they suggested that an online CALL course should involve teachers from similar types of school as they explicated below:

> In order to benefit from this training fully, the participant teachers should have similar student profiles so that they can apply what they learn in their classes and share their experiences. When I am not able to apply something and another teacher applies, it will be weird for the other teachers. But the levels of the schools are different. I cannot do what others do in my classes. Many variables are different. (Sevil)

> In the training, there were teachers from different types of schools. If teachers were from one type of school, the conditions of these schools would be similar and teachers would have more to talk about. But in our situation, a lot of things were different. Maybe, a training like this can be given based on the type of school. Schools with similar student profile and technological infrastructure can be grouped and given a training together. (Melek)

One of these teachers also highlighted that the content of the online CALL training should be designed according to the varied needs of the teachers working at different types of schools. This need was especially of great importance for teachers working at vocational high schools as one of these teachers explained:

> In the content of the training, I could not find enough material that will attract my students' interest. I needed something like games, which teach English on the sly. My students would not be interested in blogs. Their English level is very low. My need was to find something about how to teach four skills via internet. I wanted to find more interesting stuff for teenage group, which would not require high level of English but teaches them English in a fun way. (Nevin)

Most of the teachers said that they did not feel themselves comfortable asking their questions in public but preferred asking to the trainers on a one-on-one basis. As a solution for this problem, one of the teachers suggested the addition of office hours in the design of the online CALL training in which teachers can ask their questions directly to the trainers as she elucidated below:

> It was difficult to ask you questions in front of others in Edmodo. I did not want others to realize that I could not do. Rather, I always preferred asking my questions to you. I phoned you many times. That was great. But sometimes I thought maybe you had other stuff and I did not call you. If there were question and answer sessions in which we can ask our questions to you individually, it would be wonderful. (Göknur)

Nearly all of the teachers complained that they were not well-informed about the communication tools, mainly Edmodo and WizIQ at the outset of the training although there was information about these tools in the wikipage. They stressed that for people who used them for the first time, more visuals and explanations were necessary as they stated below:

> In the first week, everything was up in the air. Edmodo was okay. In Wiki, you said it was like Facebook. I understood that we would write something there and see what others wrote as in Facebook. But I had no idea about WizIQ. I really wished if there was a picture of the WizIQ platform or an

example of what is done in WizIQ would be shown. If there were some examples, it would be better. (Nevin)

I read about WizIQ and Edmodo in Wiki. You gave descriptions of these, I know. But they were not enough for me. I could not understand what we will be doing in WizIQ. I wanted to see some videos or pictures. If I had these in the first week, I would not be this much shocked. (Melek)

For the balance between theory and practice, most of the teachers said that they wanted more focus on practice in an online CALL training. They posited that theory should also be present for those interested and additional materials on the theory side should be given on the condition that they are optional as commented below:

I liked the article you uploaded on the wikipage. I am interested in theory and believe we should read such things. But not everyone likes theory so articles can be kept optional. For those like me who like reading, additional materials for reading can also be suggested. (Cemre)

I think it was good that we focused more on practice. But of course it is also beneficial to provide theory as an additional material. Everyone cannot understand theory. It depends on interest level. (Ahmet)

One of the teachers showed her need to learn about referencing and suggested that an online CALL training should include some content on that as she stated below:

I read other teachers' blogs and found many commonalities between my ideas and theirs. I was going to share some of these in my blog. If I wrote on these in my blog, would this mean stealing others' ideas? How can I quote from others? In a technology training like this, I would like to learn about such things. (Fatma)

4.3 Reasons for Some Teachers' Leaving the Study

As a corollary of the analysis of interview data gathered from teachers leaving the study, three categories emerged concerning the reasons for teachers' not completing

the training. These were related to (a) computer skills (b) prior experience in using computer in their daily life or teaching (c) the timing of the training.

Akin to some teachers who encountered many difficulties during the training due to the lack of computer skills, all teachers leaving the study except for one indicated that they were not equipped with skills to use the computer well enough to complete the online training successfully, which resulted in a lot of challenges and difficulties as two teachers explained below:

> I had many difficulties. I could not understand what to do. I could not do any of the tasks since I used the computer very slowly. I even needed to get help for ticking the boxes in the questionnaire. I had problems since I am not good at using the computer. I could not open the article you uploaded. It was too small and I could not zoom it. I could not write on the chat board during the session. I felt myself terrible. (Yeşim)

> I could not follow your instructions during the live session. I could not even enroll in Edmodo. They were so complicated. Maybe those people using such things can do but people like me who use a website like this first time can have difficulties. Maybe this is a personal shortcoming. Maybe this is related to computer proficiency or because of not being familiar with computer. (Nurten)

Two of the teachers argued that prior experience in using computer in daily life or teaching affected their success in the online CALL training. Due to lack of such an experience, they found the training very challenging and had to leave the study as they explicated below:

> I do not use computer in my daily life. I am not a good user. I do not buy from internet, do not use Facebook or any other social media. Also in my classes, I use more traditional techniques. I use total physical response, for instance. Technology is not a must. I do not use it for teaching. I also do not know which technologies are being used and how. (Nurten)

> I did not estimate the training would be this hard. I guess it requires using Word very often and being familiar with computer. I only use computer for internet to find some vocabulary or grammar games for my students. I have not used chat or Facebook. I also have not used Word or PowerPoint in my classes. I want to but I do not know how to use these. (Makbule)

As also pointed at by some of the teachers completing the study, the timing of the training posed a problem for one of the teachers leaving the study. She, though benefiting from the training, had to leave it since she did not have any time to spend on the training due to her busy schedule during the time of the training as she discussed below:

> I could not complete the training due to my busy schedule. It would have been better if the training were at a more free time, not at the end of the semester. Everything was great in the training but I would not have left it if I had not had other things to do. (Sevgi)

4.4 Teachers' Perceptions of the Transferability of the Online CALL Training

Upon an analysis of data derived from blog reports and interviews, four categories emerged as the factors affecting the transfer of knowledge and skills gained in the online CALL training to the language classroom. These were (a) perceived competence for the transfer (b) issues related to MoNE (c) technological infrastructure (d) a supporting school environment for technology integration.

At the end of the training, all of the participant teachers indicated to gain self-confidence about using technology in their classes. For the transfer of the technological tools they learnt in the training into their classes, however, they stated that they did not feel themselves competent for an immediate integration since they were in need of more time and practice with these tools as they explained below:

> When I compare myself before and after the training, I see a big improvement. At least, I think I can use technology from now on. However, I

> do not think I can use the tools of the training immediately in my classes. I do not feel myself competent. WizIQ, for instance, is quite familiar to me. But still I need to work on that to use it in my classes. Digitalstory requires some technical capabilities. I could not create it on my own. I need to work on that, too. Integration requires more experience and time. (Nevin)

> Blogs, podcasts, mobile applications, all of them were wonderful. I plan to use them in my classes next semester. In order to use blogs, I asked for help from my students. For using websites, I need to learn many things. I am not proficient. But I believe I can do these. (Göknur)

> I cannot apply these things in my classes right now. I will wait for the summer time. I need time and detailed planning. First, I should feel myself competent at using these tools, and only then I can introduce them to my students. They are all so new to me. (Melek)

Two of the teachers pinpointed the availability of technological infrastructure as necessary for the transfer of the technological tools learnt in the training into the classroom context. These teachers emphasized that without having access to technological equipments, it was not possible to integrate technology into their classes as they stated below:

> Of course, it would be great to use technology in my classes. But we do not have any technology. The only thing we have is a blackboard and chalk. If we had, we would definitely design technology integrated lessons. In these conditions, we cannot. (Sevil)

> It is possible to use all these new things but only with a good technological infrastructure. We do not even have internet at school. It is not feasible for me to apply what I have learnt in my classes. (Nevin)

Some of the teachers complained that classes were too crowded and English lesson hours were not enough for integrating the technological tools of the training into

classroom context. They, therefore, emphasized that for an effective integration, the lesson hours should be increased by MoNE as one of the teachers explained below:

> Our classes are crowded. Time is also not enough. We only have 3 hours for English lessons. This is not adequate. How can I use technology in these circumstances? When I take my students to the lab and give them instructions, the lesson ends. (Fatma)

Many teachers emphasized that the support of MoNE was required especially for teaching English online. They argued that in order for every student to have opportunities for online learning, they should be provided with technological tools and stable internet connection by MoNE and online learning should be integrated into the curriculum as teachers explained below:

> I can use WizIQ only with eager students, not with the whole class. To use it with the whole class, MoNE should support distance learning. Otherwise, our use of technology would be unofficial. Students are also unmotivated. But if it were something regulated by MoNE, they would be more eager. For instance, if we are teaching 40 hours, 2 hours of this time can be allocated for online learning. (Ahmet)

> We cannot include all of our students in online learning since not all of them have computers. It may be difficult for our students to have access to technology. . Internet or computer is not available for most of them. Technology is good but costly. MoNE should give us support here. (Melek)

Some of the teachers indicated that a school environment which supports the use of technology was required for the effective integration of the new technological tools learnt in the online CALL training into the participant teachers' classrooms. According to these teachers, the teachers, administrators and parents should believe in the merits of technology infused lessons and online learning and support them in their initiatives to integrate technology as two teachers highlighted below:

The administration should first have a positive look at technology use. When I want to use the lab, they should allow me. If teachers have a planned use of the technological equipments at school, I can use the technological skills I gained in the training in my own classrooms. (Fatma)

When I give assignments to my students, which require the use of technology at home, other teachers may resist sometimes. Some of the parents also do not want their children to use computer at home since they think it will be distractive for them. These should change if I want to motivate my students to learn online. (Cemre)

CHAPTER 5

DISCUSSION

In this chapter, the major findings of the study will be presented in relation to past relevant research and implications for practice will be presented along with suggestions for further research.

5.1 Major findings of the study

This study examined the factors affecting English language teachers' use of technology in their classrooms, their perceptions of the online CALL training they received and the transferability of the knowledge and skills gained in the training into classroom context. The results showed that teachers used technology to address language skills only to a limited extent and their use of technology was affected by many factors related to the availability of technological infrastructure, technical support, technology friendly teaching materials, curriculum, the lack of in-service training effectively incorporating the teaching of technology and pedagogy, lack of technology exposure during pre-service education, the supporting school environment and school-wise technology planning. Albeit to a parochial extent, teachers preferred using technology due to its practicality and time saving function. The use of technology also enabled them to have access to authentic teaching materials and motivate their students to learn English.

Regarding teachers' perceptions of the online CALL training in the study, teachers reported to encounter many difficulties during the training due to the lack of computer skills necessary to be successful at online training. Lack of familiarity with computers and the internet in daily life and teaching and a lack of prior experience with using asynchronous and synchronous communication tools in addition to a lack of prior experience with online training impinged upon their success in the training. Due to the lack of computer skills required for online training, teachers pointed at the need for a situated CALL training which provides teachers with ample chances to learn and apply technological tools in their teaching contexts through hands- on tasks

and activities, which can be used as a springboard for taking online training as a later stage. Teachers also indicated that thanks to the training, they learnt a variety of technological tools to be used in language classes. They also gained motivation and confidence about sustaining their professional development in CALL.

For the transfer of CALL related knowledge and skills gained in the training, most of the teachers highlighted that they did not feel themselves ready for an immediate integration of technology in their classes, but were in need of more time and practice. In addition to the need for more practice, they also substantiated the importance of the requisite conditions for technology integration to be met such as the provision of technological infrastructure, a supporting school environment and an increase in the lesson hours.

5.2 Teachers' Technology Use in Language Classes

The findings suggested that the participant teachers integrated technology into their classes to teach language skills only to a limited extent by dint of a number of variables affecting their technology use. The main factors affecting their technology infusion were related to technological infrastructure, technical support, curriculum, the availability of digital teaching materials, technological competence, lack of in-service training and exposure to technology during pre-service education alongside a supporting school environment.

When the technological tools teachers used were examined, it was seen that teachers having the technological equipment in their classes mostly used the computer and the internet and the teachers having Fatih Project tools used the IWB and the internet in order to access audiovisuals and listening materials such as videos, films, songs and websites related to language learning and teaching. Some of the teachers used the projector along with the computer to project visuals and PowerPoint presentations. When Stanley's (2013) comprehensive list of technologies that can be used in language classes shown in Table 3 below is examined, it becomes lucid that teachers' integration of technology into their classes was quite limited. None of the teachers reported to use blogs, voice recorders, text and voice chat, podcasts, online games,

etc. in their classes. Notwithstanding some teachers' use of social networks, e-mail or mobile phones, their use was mostly not for instructional purposes and was in an ad hoc manner without any prior planning to address any language skills. It can also be said that technology was used mainly as teacher tools rather than student tools giving little or no space for incorporating students into the technology integration process.

Table 3. A List of CALL Tools. Reprinted from Stanley (2013)

The Internet	Software	Hardware
automatic translators	apps	CD-ROMs
blogs	authoring software	computer room
comiv-creator websites	concordancers	data projectors
image-creation software	ebooks	digital cameras
instant messaging	electronic dictionaries	DVDs
news websites	email	interactive whiteboards
online games	interactive fiction	laptops
podcasts	mind-mapping software	mobile phones
poster websites	music software	mp3 players
social networks	presentation software	netbooks
survey websites	quiz-making software	pen/flash drives
text and voice chat	screen-capture tools	tablets
text and voice forums	social bookmarking	video cameras
video-sharing websites	sound-editing software	voice recorders
wikis	word processors	webcams

These findings were corroborated by Karakaya's (2010) study, which examined 87 English teachers' use of technology working in different regions of Turkey through a questionnaire and interview. His findings, which showed that English teachers mainly used the computer and the internet for accessing teaching materials, preparing presentations and assigning homework reaffirmed the findings of this study by indicating that only a handful of teachers used wikis, blogs, course management software and other computer technologies in their language classes although the participant teachers were "teacher coordinators/mentors" responsible for training their colleagues in their regions on the computer technologies to be used in language classes. By the same token, Akcaoğlu (2008) presented compelling evidence that

English teachers' use of technology was quite scarce in language classes and even when technology was incorporated, it was mainly used as teacher tools as similar to the finding obtained in this study. As a common theme revealed in these studies, teachers' limited integration of technology can be explained with teachers' lack of knowledge and skills related to CALL technologies and the lack of in-service training to provide them with these skills.

As the main reasons for technology use, the teachers mentioned the practicality and time-saving function of using technology, which was also revealed in earlier studies (e.g., Zhao & Frank, 2003). The other reasons were that technology helped their students improve their language skills better, motivated them to learn English and enabled access to authentic materials, which were corroborated by Lam (2000) having the same findings in an interview with ten L2 English teachers.

Teacher comments revealed that the lack of technological infrastructure, resources and materials were a great impediment to their technology integration. Due to the lack of computer, projector, stable internet connection and tablets, most of the teachers including those teachers having Fatih Project tools in their classes complained of not incorporating technology into their classes. This finding was substantiated by a vast number of prior international studies (e.g., Adelman et al., 2002; Chen, 2012; Cuban, 2001; Egbert et al., 2002; Hadley & Sheingold, 1993; Meskill et al., 2006; Mumtaz; 2000; Norris et al., 2003; Pelgrum, 2001; Rosen & Weil, 1995; Sepehr & Harris, 1995; Yunus, 2007). The studies in the Turkish context also reiterated the significance of technological infrastructure for technology integration (e.g., Akcaoğlu, 2008; Çağıltay, Çakıroğlu et al., 2001; Goktaş et al. 2009; Somyürek et al., 2009; Top, 2007; Toprakci, 2006). Considering that the participant teachers were from the capital city of Turkey, Ankara, and from one of the socio-economically high districts in that city and still had problems related to technological infrastructure, it can be asserted that the availability of technological infrastructure still stands a common problem at schools in many different regions of

Turkey, which requires immediate and prudent solutions as one of the foremost factors affecting technology integration.

Lack of technical support was another problem that impinged on teachers' infusion of technology into their classes. Teachers mainly capitalized on their students or computer teachers to solve technical problems but they were in need of more stable technical support. The vital importance of technical support was also voiced in a host of studies in the literature indicating the pivotal need of teachers to be provided on-site technical support (e.g., Kılıçkaya, 2012; Mumtaz 2000; Somyürek et al., Top, 2007; Toprakci, 2006; Yunus, 2007; Weikart & Marrapodi, 1999).

As another dimension, curriculum related factors were highly emphasized by teachers as affecting their technology integration. According to the teachers, the heaviness of the curriculum and lack of time to use technology by dint of the reduced number of English lesson hours were not conducive for successfully incorporating technology into language classes. The national university entrance exam also resulted in a loss of interest in English lessons and prevented teachers from spending their time on using technology. Several researchers emphasized the incongruence between curriculum and required conditions for technology integration in a myriad of studies (e.g., Çağıltay, Çakıroğlu et al., 2001; Egbert et al., 2002; Kılıçkaya, 2012; Meskill et al, 2006; Mumtaz, 2002; Top, 2007). In an examination of in-service teachers' use of CALL tools learnt ensuing a pre-service CALL course, Kılıçkaya (2012), for instance, found out that teachers' technology integration was heavily affected by the curriculum and national exams, who substantiated the importance of incorporating teaching with technology into the curriculum.

Another problem highlighted by teachers concerning technology infusion pertained to the lack of digital materials to be used in the teaching of four language skills. Teachers mainly complained that the textbook provided by MoNE did not include any digital components and support technology use. The teachers having Fatih Project tools, on the other hand, reported that the e-book in the IWBs was not interesting for their students due to the commonalities between the textbooks of the

primary and secondary school. Somyürek et al. (2009) also pointed at the lack of digital materials in IWBs and the lack of support of MoNE in providing teachers with digital materials for teaching.

One of the prime reasons for teachers' limited use of technology was related to their perceived computer knowledge and skills, which was not enough for effectively incorporating technology into their lessons. This was mainly due to the fact that most of the teachers did not receive any course or training on educational technology as revealed in questionnaire data. As one of the teachers commented: "….. There should be in-service training. If the number of training courses increase in number, teachers' fear of technology will decrease, I believe.", there was a need for teachers to be provided in-service training on how to utilize technology, mainly the computer in their classes since it was the most common technological equipment the teachers had access to in their classes. Lack of confidence in the use of computer and lack of basic computer skills were shown as hindrances to technology use by language teachers in a range of studies (e.g., Hong 2009, 2010; Lam, 2000; Yunus, 2007). The significant role of in-service technology training also arose in a wide variety of international and national studies (e.g. Arkın, 2003; Çağıltay, Çakıroğlu et al., 2001; Garet et al., 2001; Goktaş et al., 2009; Hong, 2009, 2010; Kanaya et al., 2005; Karakaya, 2010; Kessler & Plakans, 2008; Lam, 2000; Moore et al., 1998; NCES, 2000; Penuel, 2006; Somyürek et al., 2009; Sumi ,2011; Top, 2007; Weikart & Marrapodi, 1999; Yunus, 2007) as a requisite condition for technology infusion.

The teachers equipped with basic computer skills emphasized that they were in need of in-service training, which is specifically focused on the teaching of technologies to be used in language classes to address four language skills. They indicated that such training was absent and due to the lack of any formal CALL training, they had to sustain their professional development in CALL with their own efforts in an informal manner. Egbert et al. (2002) also found that language teachers gained most of their technological skills on their own. In addition, the absence of CALL training which showcases effective use of technology for teaching language has also been

emphasized by Hubbard and Levy (2006) who posited that "there was a need for both technical and pedagogical training in CALL, ideally integrated with one another" (p. ıx) in order to equip teachers with techno- pedagogic competence to use technology in their classes. In a similar vein, Kessler and Plakans (2008) also emphasized the importance of 'CALL specific preparation' for language teachers to enable them to gain 'contextual confidence' in their technology infusion practices.

A few of the teachers indicated that due to their use of technology during pre-service education, they felt themselves more competent at using technology in their classes. Despite benefiting from technology exposure during pre-service education, none of the teachers had any mention of taking any CALL course at pre-service level pointing at the lack of CALL focus in foreign language teacher education programs in Turkey. Although the participant teachers had at least twelve years of teaching experience, the situation does not seem to change even now since CALL is still not included as a must course in the curriculum of foreign language teacher education programs. Along the same lines, through questionnaire data gathered from 108 TESOL MA graduates in the US, Kessler (2007) also found out that pre-service teacher education programs were devoid of any CALL focus and hence these graduates had to rely on informal means of professional development in CALL due to the lack of CALL training during their pre-service education. By the same token, there have also been a wealth of earlier studies, which substantiated the importance of CALL training in pre-service education for language teachers' future technology integration (Bauer-Ramazani, 2006; Egbert et al., 2002; Eskenazi & Brown, 2006; Hegelheimer, 2006; Hong 2009, 2010;; Kessler, 2007; Peters, 2006).

As another facet of technology integration, some of the teachers emphasized the importance of a supporting school environment as one teacher stated: "If the other teachers and the administrators do not support me, how can I use technology? Of course, each and every teaching practice of a teacher is greatly influenced by the environment she works in". They argued that the negative attitudes of the administrators and some of their colleagues towards the use of technology for

instructional purposes and the varying levels of technological competence among teachers tended to inhibit the participant teachers' incorporation of technology as effectively as they desired. In a similar vein, several studies highlighted the significant role of school climate including the support of administrators and colleagues on the integration of technology (e.g., Egbert et al., 2012; Hong 2009, 2010; Lam, 2000; Karaca, 2011; Kılıçkaya, 2012; Somyürek et al., 2009; Top, 2007).By virtue of the pivotal role of school climate in technology infusion, Hong (2009) showed that the schools with L2 teachers who had more technology education had more technology integration than other schools with fewer teachers receiving training in technology, which pointed at the importance of teachers possessing technological competence at schools for effective technology infusion.

Resonating with the findings of above-mentioned studies, Top (2007) stressed the magnitude of 'a shared technology vision' among teachers and other stakeholders in the process of technology integration. Specifically, a great body of research attested to the role of administrators in providing support and maintenance as affecting the success of teachers' initiatives to use technology (e.g. Somyürek et al., 2009; Kılıçkaya, 2012). Confirming the findings of this study, Kılıçkaya (2012) also revealed that L2 English teachers were greatly influenced by the school environment, especially from the administrators in a negative way, who did not encourage CALL use and provide technical support. As a remedy to the problems related to regular access to technological equipments, the teachers suggested the development of a school-wise technology planning, which was reaffirmed in a great number of earlier studies (e.g., Gülbahar, 2007; Somyürek et al., 2009; Weikart & Marrapodi, 1999).

5.3 Teachers' Perception of the Online CALL Training: A Sequential Procedure for Online CALL Training

One of the most significant findings of the study was that a great majority of the participant teachers suffered from a lack of computer skills to survive in the online CALL training and ran into a considerable number of problems especially while using the communication tools of the training. It was evident that teachers had

varying levels of computer competency and for those devoid of the proficiency to use the computer, the training was too challenging as one teacher highlighted the insufficiency of her computer skills for being successful in the training: "….I thought I should leave the training. The training was above my level."

Teachers' different levels of computer competency were highly emphasized in the relevant literature as affecting the success of CALL course or training. In the implementation of internet projects for in-service EFL teachers in Siberia, Olesova and Meloni (2006), for instance, pointed out that teachers' computer skills varied drastically and thereby suggesting that this should be taken into consideration in the planning and design of any CALL training. In a similar vein, Peters (2006) emphasized that the pre-service language teachers taking a CALL course had a wide range of technological skills and this stood as a barrier to the efficacy of the course. In an online pre-service CALL course, Bauer- Ramazani (2006) also referred to some teacher candidates with "varying levels of comfort with technology" (p.196) as one of the challenges in the online course. Considering these, there is no denying that computer skills are more vital in an online CALL training, which requires certain competences concerning the use of the computer and especially the various asynchronous and synchronous tools inherent in the design of the online training.

As regards the substantial question of how much of the CALL training should focus on the technical and pedagogical side, Peters (2006) found out that a single pre-service CALL course which melded the teaching of both the technical and pedagogical skills failed to teach the teachers how to integrate these skills into their teaching since most of the time was spent on the teaching of technical skills and little time remained for teaching how to use the technologies specifically for language teaching. As revealed by Peters' findings, the varying levels of computer proficiency of language teachers and the inefficiency of teaching both technical and pedagogical skills in a single course demonstrated that CALL training focusing on the pedagogy should take place only after a technical knowledge and skill-base is established. This

assumption holds true especially for an online CALL course, which requires a wide variety of technical skills on the part of the teachers.

Due to the lack of computer skills, some of the teachers expressed their need to first take a course on basic computer skills before receiving online CALL training. They emphasized that this training should be face-to-face and expose them to a variety of computer applications (e.g., Microsoft Office Programs). On the other end of the spectrum, the teachers who did not encounter much technical difficulty during the training stated to benefit from prior experience with using the computer, the internet and asynchronous and synchronous tools in their classes or daily lives or taking an online course beforehand as affecting their success in the online training. The importance of basic or moderate level of ICT competence was reiterated in the literature (Bekele, 2008; Erlich et al., 2005; Hukle, 2009; Menchaca & Bekele, 2008) along with typing speed (Hukle, 2009), prior experience in using the internet (Shih et al., 2006), confidence in online technologies (Song et al., 2004) and the online learning environments (Menchaca & Bekele, 2008).

Another substantial finding of the study was related to the teachers' need for a situated CALL course, which incorporates real life classroom practices and applications into their CALL learning. Most of the teachers indicated that such situated CALL training would enable them to see the real life applications of the CALL technologies and deal with the concomitant problems they encountered during the processes of integration more easily with the help of CALL experts. The situatedness of a CALL course or training was either directly or indirectly mentioned as a conceptual framework in a wide range of studies and a great body of CALL researchers also designed their CALL course or training based on the premises of situated learning. (e.g., Chao, 2006; Cutrim Schmid, & Hegelheimer, 2014; Egbert, 2006; Egbert & Brander, 2010; McNeil, 2013; Rickard et al., 2006).

Situated CALL training was especially found to be worthwhile since the realities of the real language classroom is quite different from the ideal classroom, which is generally taken for granted in technology training. Concerning this divergence

between the real and ideal language classroom, Egbert (2006) stated the following stressing the importance of situated CALL training:

"In real teaching situations, time is strictly limited, decisions have to be made quickly, priorities have to be juggled and what we might *like* to do is not always what we are *able* to do (p.166)."

By the same token, the teachers in Meskill et al.'s (2006) study who took part in expert –novice mentoring in their teaching contexts pointed at the importance of "more time to learn, to experiment, to try things out, and to integrate" (p.294) through "exposure to real teaching situations" (p.282) for benefitting from CALL training. Along the same lines, the pre-service teachers taking a CALL course acknowledged the value of the situated activities in the course as a precursor for their CALL learning. Hubbard & Levy (2006) have also drawn our attention to the "need to connect CALL education to authentic teaching settings" (p.ix) as a common theme arising in CALL teacher education. Taken together, these studies substantiate the merits of situated CALL training for in-service language teachers, who are mostly in need of on-site CALL exposure and practice in their local contexts.

Despite the advantages of situated CALL training, there is no denying that online CALL training also hold many potentials for the training of language teachers as evidenced by earlier studies (e.g., Bauer- Ramazani, 2006; Egbert, 2006). One of the reasons for teachers' desire for situated CALL training was most probably related to their lack of computer skills, their familiarity with face-to-face mode and lack of prior experience with online training. Another probable reason was their need to learn and apply CALL in their local contexts since CALL learning outside the real language classroom can neglect the real life problems hindering teachers' technology integration and result in know-how but not integration. Since the real teaching contexts are surrounded by a considerably high number of challenges, it is not always easy to incorporate what is learnt in CALL training into their teaching contexts. Considering teachers' feedback and the value of online CALL training, the

following sequential procedure can be stipulated to illustrate the path to online CALL training as shown in Figure 6:

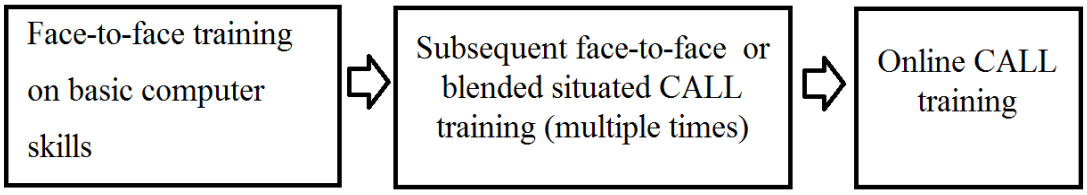

Figure 6. A Sequential Procedure for Online CALL Training

As shown in the Figure 6, there should be several stages until L2 English teachers reach the competency to receive online CALL training. The first stage should encompass face-to-face training which expose teachers to various computer applications and provide them with basic computer skills required for using the computer and various synchronous and asynchronous communication tools effectively as personal users. After the teachers gain these skills, they can prepare for taking a face-to-face or blended situated CALL training which presents good models of using CALL technologies in language classes through on-site CALL learning and application in teachers' classroom contexts with the help and mentoring of CALL experts. For the success of this procedure, it is important to define the set of skills required for each stage, especially for the first stage so that teachers possessing the required skills of a certain stage can move on to the next stage to upgrade his/her knowledge and skills related to CALL.

The second stage can be ideally blended instead of face-to-face since the blended CALL course holds the potential to consolidate teachers' skills to practice using the synchronous and asynchronous communication tools learnt in the first stage and bolster their familiarity with using technology as learners of CALL. The second stage should recur at least a few times until teachers feel themselves competent to pass the third stage. At least two situated CALL training can be set as the minimum since

teachers will be in need of having enough situated experience to use CALL in their classrooms until the online experience.

In the third stage, considering that L2 English teachers have gained considerable experience with using CALL in their classes and are equipped with the skills to be successful in the online CALL training, they can be conceived as ready for receiving the online training. Similar to Bax's (2003) view of normalisation which implies a stage in which technology is integrated into language classroom "as an integral part of every lesson, like pen or book" (p.23) as the end point of CALL integration, online CALL training should be the ultimate stage in CALL teacher education and be ample in number and accessible to L2 teachers on a perennial basis.

Online training should subject teachers to a variety of cutting edge CALL technologies. This training, however, should also go through many stages in itself. The first series of online training courses should keep its situated focus by grouping teachers from schools with similar characteristics (e.g., similar technological infrastructure) and giving space for teachers' classroom contexts and their real-life technology using practices in the design of the online CALL training. Taking the varied teaching contexts of language teachers and its negative effect on the success of CALL training into consideration, it would be wise to have such a grouping of teachers who share common problems and hindrances to technology integration. After teachers gain enough experience with having online CALL training, which is also situated, teachers can go on receiving online CALL training, which is not necessarily with situated focus but designed for any language teachers who have gained enough competence not only to use but also adapt new CALL tools learnt in the CALL training to his / her unique teaching context based on his/her local needs. In a situated online CALL course linking pre-service and in-service language teachers, Egbert (2006), for instance, discussed how relevant the authentic experiences in the real classroom context was to the needs of both parties and enhanced their CALL related know-how. As regards teachers' competence to adapt CALL learning to their local context, Robb (2006) also emphasized the importance

of teacher autonomy and teachers' "ability to extend one's learning for oneself" (p.336) by finding ways to apply the new technologies learnt in a training course to their contexts.

Ideally, in online CALL training, various Online Communities of Practice (CoPs) worldwide which consist of "groups of technology using language teachers" (Hanson-Smith, 2006, p. 300) should be introduced to the L2 teachers and their participation in these communities should be encouraged. Teachers should be given guidance and help on how to benefit from these communities for their professional development in CALL. Despite the great potential of these communities for enriching CALL expertise, however, their voluntary nature can act as a hindrance to teachers' active participation in these communities. This should not be dissuasive, however, considering that "many CALL practitioners are self-trained" (Robb, 2006, p. 339) and many language teachers have the motivation to self-train themselves (Kessler, 2006). These communities, therefore, can be presented to L2 teachers as a great source and means for CALL learning. A national CoP can also be formed with the help of keen CALL researchers and practitioners willing to devote their time and energy to connect to Turkish L2 language teachers through constant sharing and cooperation.

Most of CALL training takes place in an informal and ad hoc manner (Hubbard & Levy, 2006; Kessler, 2006) which prevents a unity among language teachers in terms of having the skills and knowledge to use technology in their classes. It is, therefore, important to regulate and integrate CALL training into the in-service training program of language teachers through the support of MoNE and make it compulsory for all language teachers including novice and veteran teachers. All language teachers should pass the afore-mentioned stages and get constant CALL training introducing them to new technological tools. Reward mechanisms should be developed to encourage teachers' active participation in these training courses (Robb, 2006) along with "professional release time" to compensate for their devoted time in these courses (Rickard et al., 2006).

Maybe more important than all of the steps discussed above, the initial step in the initiatives of CALL teacher education should be to convince language teachers of the importance and merits of using CALL in language classes. Given that teachers have different beliefs about the value of using technology in teaching, it is no surprise that some teachers will resist using it in their classes. Wong and Benson (2006), for instance, posited that the teachers who meet IT late in their professional careers may be affected negatively by their "deep rooted beliefs about teaching and learning" in their initiatives of technology integration (p. 262). As another facet of the processes of reconcilement with teachers, there is a vital need to present samples of technology integrated lessons to the teachers, which corroborate the value of CALL in language teaching and learning. Teachers' need for effective models of technology integration has been evidenced in prior studies (e.g., Dwyer & Sandholtz, 1991; Russell et al., 2003; Sandholtz & Dwyer, 1997). To this end, CALL experts can model CALL integration themselves, showcase videos or other audiovisuals related to CALL lessons from different part of the world and get language teachers to gain some insights about the potential of CALL technologies for language teaching.

5.4 Other lessons learnt from the online CALL training

The timing of the training posed a great challenge for teachers who could not spare enough time for studying and practicing the tools of the training due to their busy schedule at school. By virtue of this lack of time, most of the teachers could not do weekly tasks and have an active participation in the training as one of them explained: "I wish the training would be at a time when I was totally free. This way, I could give my concentration on the training fully." Teacher feedback showed that the training should be designed at a more convenient time when they have more time to study the training tools, for instance, at the beginning of the teaching semester as a few of the teachers suggested. As an alternative voiced by some of the teachers, the teachers should be given "professional release time" during the training which was also desired by in-service teachers taking CALL training in a nation-wide initiative in Ireland (Rickard et al., 2006, p.203).

Related to the technical aspect of the training, some of the teachers complained about the lack of information on the required programs to be uploaded on their computer in order to have a seamless online learning experience in the training. Some of them also referred to some problems concerning their internet speed. The 'dependability', 'capacity' and 'speed' of the hardware and software in online learning environments were highlighted in other studies (e.g., Menchaca & Bekele, 2008) as affecting the success of participants in these environments. To this end, it is advisable to inform the participant teachers of the required computer programs for using the synchronous and asynchronous tools in the CALL training without any problems before online training started.

To the observation of the researcher and through teachers' feedback, it was apparent that teachers avoided from using the asynchronous platform Edmodo for sharing ideas or asking questions as one teacher said: "It is hard to reveal that I am not able to do in front of others. So I couldn't write about my problems there." to account for her non-use of Edmodo for sharing the technical problems she faced during the training. Rather than using the Edmodo, many teachers preferred contacting the trainers directly via telephone. In a similar vein, some of the teachers expressed their desire to meet the participant teachers face-to-face before the training started in order to feel as a community and have closer relationship. In her online CALL course, Bauer-Ramazani (2006) also emphasized the significance of the 'human factor' in online courses and to address this factor, she referred to some 'social rapport-building activities' and design elements as shown in the following table.

Table 4. The "human factor" in CALL Online. Reprinted from Bauer-Ramazani (2006, p.191)

Elements of the Human Factor	
Personal contact:	urging participants to call or email the teacher immediately, even on weekends, to avoid frustration; meeting face-to-face with on-campus students to solve problems; exchanging phone numbers to facilitate group collaboration
Visual contact:	teacher-constructed Web page with pictures and biographical information about the participants; use of Webcam by teacher and students during online conferencing
Voice contact:	voice conferences with the teacher and with group members; audio comments in peer and teacher reviews of projects (embedded in documents), audio e-mails, telephone
"Checking in":	checking in with students regularly and briefly, e.g. when they "come online"; being invited to an impromptu audio conference (text/voice/Webcam) with one or more students or students among each other to discuss projects or to counteract reported "loneliness in cyberspace" (see also Kollock's characterization of "online communities as more isolated than 'real-life' groups", 1999)
Q&A forum:	offering a weekly Q&A forum in the course site devoted to student questions and answers, either pertaining to the tasks directly or to technology in general
Virtual Cafe:	a cyber cafe where course participants can discuss issues not directly related to the course
Constant vigilance:	immediately checking in with students who fall behind in their weekly Assignments

The human factor described in the above table was also apparent in teachers' comments as a common denominator. Some of the teachers suggested office hours to ask questions whereas some others expressed their desire to use cell phones to contact the trainers in lieu of using e-mails. Teacher feedback, therefore, emphasized the importance of addressing the human factor in online CALL training in order to create a friendlier and sharing learning community conducive for more effective learning.

Reflection activity in blogs was found to be beneficial by teachers since it enabled them to reflect on their learning processes, hear other teachers' voices and gain competence in using blogs as a reflection tool. Teacher reflection has arisen as a common theme in many CALL courses and training (e.g., Hoven, 2007; Meskill et al., 2006; Slaouti & Motteram, 2006) as a valuable means for CALL learning (Hubbard, 2008). Considering the feedback of participant teachers and relevant literature, reflection in some form can be suggested in the design of CALL training, be it face-to-face or online.

A few of the teachers reported to benefit from the clear instructions of the trainers on the steps of hands-on applications of training tools and the elaborate explanation of weekly tasks in the wikipage and the e-mails sent at the beginning of each week as a checklist for weekly tasks. Trainers' timely feedback on teachers' completed tasks and the flexibility provided to teachers in the choice of some tasks and the adjustment of deadlines were also highly valued by these teachers. The literature to date has also emphasized the importance of setting clear expectations for the success of online courses. (e.g., Abel, 2005; Bauer- Ramazani, 2006; Bekele, 2008; Chickering & Gamson, 1987; Çağıltay, Graham et al., 2001). Flexibility was also found to be one of the most distinguished feature of online environments (Menchaha & Bekele, 2008).

Related to the content of the CALL training, a few of the teachers made some suggestions. Two of the teachers expressed their need to learn about copy right issues and referencing while using sources from the internet. Another teacher working at a

vocational high school and complaining about her students' lack of willingness to learn English, desired to learn more fun CALL activities such as online games to attract her students' attention to the lesson. Feedback from teachers stressed the importance of carrying out a needs analysis study with language teachers before CALL training is conducted (Hubbard & Levy, 2006).

Despite the written explanation about the communication tools of the training, mainly WizIQ and Edmodo in the Wikipage, some of the teachers noted that the explanation was not informative enough, which resulted in a lot of panic and stress for teachers especially in the first week of the training. These teachers had a desire to be provided more information about these tools via more audiovisuals which show the examples of the possible learning activities in these environments. Taking this feedback into consideration, it is viable to present wide variety of materials giving information about the training tools of the training before the CALL training gets started.

5.5 Teacher Voices on the Transferability of CALL Know-how to Real Language Classroom

Teacher comments in the interview revealed that the online in-service CALL training enabled teachers to get to know new CALL tools and gain confidence about integrating technology into their language classes. It appears that the CALL training was beneficial for teachers since they stated to develop a knowledge and skill-base to use technology in their classes and got motivated to further their CALL competence by participating in professional development activities related to CALL ensuing the training. Some of the teachers also indicated that some of their ideas on technology were challenged and underwent some changes as their CALL related knowledge and skills proliferated during the training.

Earlier studies showed that training or coursework in CALL enabled pre-service or in-service language teachers to expand their know-how in CALL (e.g., Desjardins & Peters, 2007; Hegelheimer, 2006; Olesova & Meloni, 2006). The literature to date also showed that CALL teacher education helped teachers develop positive attitudes

towards CALL (e.g., Kamhi-Stein, 2000; Lam, 2000; Meskill et al., 2006; Peters, 2006), bolster their confidence about using some CALL tools in their classes (e.g., Desjardins & Peters, 2007; Meskill et al., 2006; Olesova & Meloni, 2006) and challenge their ideas on the use of technology in language teaching (e.g., Chao, 2006).

Teacher voices in the blogs indicated that teachers' transfer of the knowledge and skills gained in the CALL training to real language classroom was affected by many factors such as perceived competence for the transfer, issues related to MoNE, technological infrastructure and a supporting school environment. One of the most apparent theme in teachers' reflection reports was their lack of perceived competence to integrate the tools learnt in the training into their classroom contexts. Nearly all of the teachers pointed out that they needed more time and practice to feel themselves competent for the incorporation of CALL tools of the training into their classes. This need is certainly plausible considering that "one course alone is probably insufficient to change teachers' practice either immediately or over time (Egbert et al., 2002, p.113). As elaborated in the sequential procedure for online CALL training, teachers are in need of multiple CALL training experience, which should provide them with situated CALL learning and on-site support and guidance in their teaching contexts. This will enable them to gain the competence to integrate technology into their classes with great confidence.

Teachers' lack of perceived competence to infuse the CALL tools learnt in the training into their classes is in line with earlier research which says that one technology course or training is not enough for integration of technology (Desjardins & Peters, 2007; Egbert et al., 2002; Meskill et al.,2002; Peters, 2006). As Meskill et al. (2006) lucidly explicates, "Effective integration after all is a complex, situated activity. What educators need to know when it comes to effective integration is in large part developed experientially in real institutional contexts. (p.283)", pointing at the value of situated activity in CALL learning. The CALL training which starts with

a situated focus in face-to-face or blended mode and continues in the online form will ideally enable teachers to gain the competency to infuse CALL into their classes.

Another dimension of the transferability issue can be further expanded by the researcher's observation and feeling that the tailoring of the content and structure of the CALL training to the teachers' teaching needs is significant for the transferability of the CALL training. From teachers' comments, it became evident that the scrutiny of the English syllabus, textbook, curriculum, and standing closer the teachers' teaching contexts could have yielded more benefits for the teachers receiving the CALL training. It is lucid to the researcher that no matter what the medium of the training is, the training should be integrated into teachers' teaching contexts and practices, which may not be sufficienly addressed in this study preventing the transferability of the knowledge and skills gained in the training into real language classroom.

Along with the proposed sequential procedure for online CALL training, it is of pivotal importance to rule out the barriers to technology integration and the transfer of CALL competence gained in the training into the language classroom. Utmost important is to improve the technological infrastructure to the quality that teachers have access to technologies and technical on-site support on a perennial basis. Secondly, all parties including the MoNE, the colleagues and school administrators should work in concert to create a collaborative school environment conducive for effective technology integration.

CHAPTER 6

CONCLUSION

This final chapter presents an overall summary of the study, elaborates on the implications of the study for field of CALL teacher education and points at the limitations of the study by proposing recommendations for further research.

6.1 Overall Summary of the Study

This study aimed at examining the factors affecting a sample of eight in-service Turkish L2 English teachers' use of technology in language classes and their perception of the online CALL training they received on a voluntary basis and its transferability to the language classroom. The findings demonstrated that the factors that impinged on teachers' technology integration reiterated the factors found in the literature to date. These factors were mainly related to the technological infrastructure, technical support, digital teaching materials, curriculum, the lack of in-service training effectively incorporating the teaching of technology and pedagogy, lack of technology exposure during pre-service education, supporting school environment and school-wise technology planning. Mostly by dint of the lack of in-service technology training that prepares teachers to use CALL in their classes, the participant teachers were devoid of the know-how to utilize the affordances of technology for language teaching and therefore, their infusion of technology was quite limited to address four language skills and teach English via technology.

The online CALL training was found to beneficial by language teachers who pointed out that the training enabled them to learn a variety of technological tools to be used in language classes, gain self-confidence about integrating technology into their classes and motivated them to sustain their professional development in CALL. The participant teachers, however, suffered from lack of computer skills required for being successful at online training and also reported lack of competence to integrate the CALL tools learnt in the training into their classes. As a remedy for these

problems, a sequential procedure for online CALL teacher education has been proposed with multiple stages and steps until L2 teachers receive online CALL training to perpetuate their professional development in CALL on a perennial basis. According to this proposed procedure, L2 English teachers lacking basic computer skills should first take a training course which exposes them to various computer applications and equip them with the skills to use various synchronous and asynchronous tools. Ensuing this stage, the teachers should be given face-to-face or ideally blended in-service training which situates CALL learning in teachers' classroom contexts and provides teachers with ample opportunities for practicing CALL in their classes with the help of experts in CALL. After teachers receive this type of situated CALL training a few times, they can be ready for online CALL training which keeps it situated focus but scales this focus down gradually until teachers take enough situated online training courses to feel themselves competent to integrate the technological tools of the training into their local contexts. In these courses, they should also be informed about various online CoPs and learn how to benefit from these communities for the purposes of language teaching.

6.2 Implications for CALL Teacher Education

This study, as a case study, strove to uncover contextual information about a sample of eight Turkish L2 English teachers' technology integration practices in their language classroom through self-report data with the notion that any CALL training cannot achieve success without the exploration of contextual factors impinging on the teachers' use of technology in their unique teaching contexts. The study validating the findings of earlier studies has shown once again how vital it is to rule out the factors acting as a barrier to teachers' technology infusion, at least as important as the quality of the technology training they are provided. It is, therefore prudent, to suggest that in order to enable language teachers to integrate CALL into their classes, the multi-faceted nature of technology integration should be addressed and an elaborate examination of contextual factors should be conducted along with the possible solutions and remedies to foster teachers' technology use upon receiving CALL training.

This study aimed at discovering the potential of online CALL training as a viable means to train in-service language teachers on how to harness the benefits of CALL in their classes. The notion of online CALL training is a relatively new concept and if not any, there have been only few studies exploring its merits and pointing at its pivotal role in the field of CALL teacher education. By virtue of the great advantages online CALL training holds for the future of CALL teacher education, it is worthwhile to test its efficacy for learning about CALL especially from the viewpoint of teachers receiving such training.

Having a lot in common with the face-to-face mode albeit, there is no denying that online CALL training differs from face-to-face training significantly in terms of design principles among many others. Due to the paucity of research, there is little empirical evidence on how to design online CALL training in a way to maximize its potential for successful CALL learning. Getting a rich body of feedback from the participant teachers concerning the communication tools and many other elements in the online training, it yields valuable information about the design principles of the training to inform the future studies which attempt to deliver online CALL training.

Finally, the study revealed that there is a broad range of computer skills among in-service language teachers and not every teacher is equally prepared to receive online in-service CALL training which requires a set of computer skills on the part of the teachers. In addition, the teachers have an immense need to learn and practice CALL in situated contexts, which allows them to use CALL and see its effect in their local context. To melt these concerns into one possible solution, a sequential procedure for in-service online CALL training has been proposed with various implications for CALL practitioners who desire to transfer the know-how gained in the training to their classes and also for CALL researchers who aim to test the veracity of the proposed procedure for preparing language teachers to use technology in their classes.

6.3 Recommendations for further research

This study drew on self-report data collected through interviews and reflection reports written in the blogs by the participant teachers. Due to the lack of observation of teachers' classroom practices, the researcher had to rely on information reported by teachers, which can be seen as a limitation of the study. Further research can address this limitation by including the observation of L2 teachers' classes in order to make sure that teacher reports are in conjunction with their real classroom practices. In an examination of teachers' use of technology in their classes, for instance, the observation data will be worthwhile since what and how of technology integration reported by teachers can display differences in real language classroom. Also, the substantial question of the extent to which the knowledge and skills gained in the CALL training can be transferred to real language classroom can be better examined through observing language teachers' unique classroom contexts.

The study participants were digital immigrants meeting technology late in their lives, which can be an explanation for their lack of computer skills and unfamiliarity with online technologies. Further research can engage in providing digital native teachers an online CALL training and examine their perceptions of such training.

In this study which proposes a sequential procedure for in-service online CALL training, the researcher suggested that this procedure is a viable means to train in-service language teachers through a multiple stage approach and to provide CALL training for these teachers on a perennial basis. Further research can test the efficacy and veracity of this procedure for CALL teacher education through its operation in real CALL teacher training scenarios. In addition, the skill levels representing each stage in the procedure should be defined and communicated to the teachers to receive the training that suits the skill levels he/she possesses. Instruments can also be developed to measure which stage level each individual teacher belongs to.

The participating teachers' immense need for situated CALL course pointed at the importance of linking teachers' teaching contexts to their CALL learning. A training, be it online or face-to-face, therefore, should be built on considerable information

about the teachers' teaching contexts, the curriculum, the textbooks they use, the time left for teachers' use of technology among much other information, which may be insufficient in this study. Although this study introduced teachers to basic CALL tools only, this concern still applies since the teachers are in need of training that is integrated in their daily teaching practices and support these practices. This is an important limitation that should be taken into consideration in any CALL training, which should not be detached from the teachers' daily teaching practices regardless of the medium of the training.

6.4 General conclusion

This study investigated the factors affecting a group of Turkish L2 English teachers' use of technology in their classes, their perception of online in-service CALL training they took in a four week time and its transferability to the language clasroom. The findings pointed at the importance of providing language teachers with constant and regular CALL training, which gradually equips them with the competence to integrate CALL into their classes through a step-wise approach.

CALL teacher education, is undoubtedly, an alluring field for research and of pivotal importance for preparing language teachers to adapt to the needs of the 21st century as professionals who can learn, adapt and evaluate CALL tools and easily integrate into their language classes. It is, therefore, important to investigate the potential of various approaches to CALL teacher education and utilize their utmost benefits for training language teachers worldwide.

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APPENDICES

APPENDIX A: Consent Form (In Turkish)

Gönüllü Katılım Formu

Yabancı Diller Eğitimi Bölümü öğretim üyesi Prof. Dr. Gölge Seferoğlu danışmanlığında, Araştırma görevlisi Behice Ceyda Songül tarafından yüksek lisans tezi kapsamında yürütülen bu çalışma, Milli Eğitim Bakanlığında çalışan İngilizce öğretmenlerinin sınıf ortamlarında teknoloji kullanma uygulamalarını araştırmakta ve bu kapsamda 2-29 Aralık tarihleri arasında alacakları teknoloji eğitimi hakkındaki görüşlerini ortaya çıkarmayı hedeflemektedir. Verilecek teknoloji eğitimi online olup katılan öğretmenlerin çeşitli haftalık online aktivitelere dahil olmalarını gerektirmektedir.

Çalışmaya katılım gönüllülük esasına dayanmaktadır. Katılımcılar istedikleri zaman araştırmayı yarıda bırakma hakkına sahiptir, böyle bir durumda herhangi bir olumsuz bir sonuç ile karşılaşmayacaklardır. Katılımcı bilgileri gizli tutulacak ve sadece araştırma amaçları için kullanılacaktır.

Katılım ve katkılarınız için çok teşekkür ederiz. Aşağıdaki iletişim bilgilerini kullanarak araştırmacı ve danışmanı ile iletişime geçebilirsiniz.

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Bu çalışmaya tamamen gönüllü olarak katılıyorum ve istediğim zaman yarıda kesip çıkabileceğimi biliyorum. Verdiğim bilgilerin bilimsel amaçlı yayımlarda kullanılmasını kabul ediyorum. (Formu doldurup imzaladıktan sonra uygulayıcıya geri veriniz).

Katılımcının:

ADI SOYADI:…….

TARİH:----/----/-----

İmza

APPENDIX B: Pre-interview Questions (In Turkish)

Pre-interview questions in Turkish are the following:

1. Dil öğretirken teknoloji kullandığınız oldu mu? Hangi şekillerde kullandınız?

2. Dil öğretirken niçin teknolojiyi kullandınız / kullanmadınız? Şartların farklı olması durumunda teknoloji kullanma uygulamalarınız değişiklik gösterir miydi?

3. Dil öğretirken teknoloji kullandığınızda herhangi bir zorlukla karşılaştınız mı? Bu zorluk/zorluklar teknolojiyi kullanmanızı herhangi bir şekilde etkiledi mi?

4. Sizce dil öğretirken teknoloji kullanmak ne kadar ve hangi yönlerden önemlidir? Teknolojinin dil öğretiminde nasıl bir rolü olduğunu düşünüyorsunuz?

5. Çalıştığınız kurumda dil öğretirken teknoloji kullanmak isteyen öğretmenlere bir destek sağlanıyor mu? Nasıl bir destek sağlanıyor? Nasıl bir desteğin sağlanmasını isterdiniz?

6. Okul idaresinin eğitimde teknoloji kullanımına yönelik tutumları nasıldır? Diğer öğretmenlerin, öğrencilerin, velilerin tutumları nasıldır?

7.Dil öğretiminde teknoloji kullanmaya nasıl başladınız? Bu konuda mesleki gelişiminizi nasıl devam ettiriyorsunuz?

8. Bir öğretmen olarak, öğretim teknolojisi alanındaki gelişmelere yönelik tutumunuz nedir?

9. Okulunuzda Fatih projesi uygulandı mı? Uygulandıysa projedeki teknolojik araçları sınıfınızda kullanıyor musunuz? Nasıl?

10. Fatih projesindeki teknolojik araçlarını kullanmanızı olumlu veya olumsuz yönde etkileyen etmenler var mıdır? Bunlar nelerdir?

Pre-interview Questions (In English)

Pre-interview questions in English are the following:

1. Have you ever used technology while teaching English? If yes, in what ways?

2. Why do you use or do not use technology in their classes while teaching English?

If the conditions were different, would your technology using practices differ in any way?

3. Have you encountered any difficulties while using technology while teaching English in your classes? If yes, have these difficulties affected your technology use in any way?

4. To what extent and in what ways do you believe the use of technology in language classes is important? What is the role of using technology for teaching language for you?

5. Is there any support provided to the teachers who would like to use technology for teaching English in your teaching context? What kind of support is provided? What kind of support would you like to get?

6. What is the attitude of the school administrators at your school towards the educational use of technology? What are the attitudes of your colleagues, students and parents?

7. How did you start using technology for teaching English? How do you perpetuate your professional development in this area?

8. What is your attitude towards the advancements in the field of educational technology?

9. Is your school equipped with the Fatih project tools? If yes, do you use the project tools in your classes? How?

10. Are there any factors affecting your use of the Fatih project tools in a positive or negative way? What are these factors?

APPENDIX C: Questionnaire: Technology Use in English Lessons

TECHNOLOGY USE IN ENGLISH LESSONS

Dear English teachers,

This questionnaire aims to gather some demographic information about you and also uncover information about the technology use in your classrooms. It is interested in your genuine ideas and practices in the classroom so please try to give as much accurate and detailed information as possible while answering the questions. Please note that the data being collected will be used only for research purposes. Your participation will be kept confidential and your responses will be kept anonymous.

Please, send the questionnaire to ceyda@metu.edu.tr when you complete it.

Thank you very much for your contributions.

Behice Ceyda Songül

PART I: In this section, you will see some items related to the integration of technology in your classroooms. Please choose the number that best desribes you.

Example	_____	5	4	3	(2)	1

Technology integration: Using computers to support students as they construct their own knowledge through the completion of authentic, meaningful tasks.

Examples: Students working on research projects, obtaining information from the Internet, students constructing Web pages to show their projects to others, students using application software to create student products (such as composing music, developing PowerPoint presentations, developing Hyper Studio stacks).

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. I feel confident that I understand computer capabilities well enough to maximize them in my classroom.	5	4	3	2	1
2. I feel confident that I have the skills necessary to use the computer for instruction.	5	4	3	2	1
3. I feel confident that I can successfully teach relevant subject content with appropriate use of technology.	5	4	3	2	1
4. I feel confident in my ability to evaluate software for teaching and learning.	5	4	3	2	1
5. I feel confident that I can use correct computer terminology when directing students' computer use.	5	4	3	2	1
6. I feel confident that I can help students when they have difficulty with the computer.	5	4	3	2	1
7. I feel confident that I can effectively monitor students' computer use for project development in my classroom.	5	4	3	2	1
8. I feel confident that I can motivate my students to participate in technology-based projects.	5	4	3	2	1
9. I feel confident that I can mentor students in appropriate uses of technology.	5	4	3	2	1
10. I feel confident that I can consistently use educational technology in effective ways.	5	4	3	2	1
11. I feel confident that I can provide individual feedback to students during technology use.	5	4	3	2	1
12. I feel confident that I can regularly incorporate technology into my lessons, when appropriate to student learning.	5	4	3	2	1

13. I feel confident about selecting appropriate technology for instruction based on curriculum standards.	5	4	3	2	1
14. I feel confident about assigning and grading technology based projects.	5	4	3	2	1
15. I feel confident about keeping curricular goals and technology uses in mind when selecting an ideal way to assess student learning.	5	4	3	2	1
16. I feel confident about using technology resources (such as spreadsheets, electronic portfolios, etc.) to collect and analyze data from student tests and products to improve instructional practices.	5	4	3	2	1
17. I feel confident that I will be comfortable using technology in my teaching.	5	4	3	2	1
18. I feel confident I can be responsive to students' needs during computer use.	5	4	3	2	1
19. I feel confident that, as time goes by, my ability to address my students' technology needs will continue to improve.	5	4	3	2	1
20. I feel confident that I can develop creative ways to cope with system constraints (such as budget cuts on technology facilities) and continue to teach effectively with technology.	5	4	3	2	1
21. I feel confident that I can carry out technology based projects even when I am opposed by skeptical colleagues.	5	4	3	2	1

PART 2: In this section, you will see some items related to your attitude toward technology. Please choose the number that best desribes you.

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1. Technology makes my professional work more difficult.	5	4	3	2	1
2. Using computers for learning takes students away from important instructional time.	5	4	3	2	1
3. Computers should be as important and available to students as pencils and books.	5	4	3	2	1
4. I am confident using technology as a learning resource.	5	4	3	2	1
5. I feel out of place when confronted with technology.	5	4	3	2	1
6. I do not believe the quality of English education is improved by the use of technology.	5	4	3	2	1
7. I am concerned that technology may interfere with student	5	4	3	2	1

interactions.					
8. There is not enough time to incorporate technology into the subjects I teach.	**5**	**4**	**3**	**2**	**1**
9. I really enjoy using computers and the Internet instructionally.	**5**	**4**	**3**	**2**	**1**
10. Students should be able to use computers to help them solve problems in English.	**5**	**4**	**3**	**2**	**1**
11. Students can use computers and technology to help make informed decisions.	**5**	**4**	**3**	**2**	**1**

PART 3. BACKGROUND INFORMATION

Please fill in the demographic information below.

Name:

1. Age: _____

2. Gender: Male ☐ Female ☐

Teaching Background

3. Years of Teaching Experience: _____

4. Grades you have taught up to now: _____ grades (e.g. 4th, 9th, etc.)

5. Currently teaching: _____ grades (e.g. 6th, 9th, etc.)

6. The name of the school you work: _____

Educational Background

7. Degree

University degree(s): Indicate whether the degrees are completed or in progress

B.A. in _____

B. Ed. in _____

M.A. in _____

Ed. D in _____

Ph. D. in _____

none ☐

teaching certificate ☐

other ☐

8. took a course in educational technology? yes ☐ never ☐

which one (s)_____

9. received any other training in educational technology (i.e. workshops, seminars, etc.)

yes ☐ never ☐

10. attend conferences on L2 teaching? yes ☐ no ☐

read journals on L2 teaching? yes ☐ no ☐

belong to any professional teacher associations? yes ☐ no ☐

Personal Use of Technology

11. do you have TV ☐ VCR ☐ cassette player ☐ CD player ☐

DVD player ☐ electronic organizer ☐ cell phone ☐

computer ☐ - at home ☐ at work ☐

Internet access - via ☐ phone ☐ cable

12. (if have computer) primary use(s)? word processing ☐ e-mail ☐ newsgroups ☐
games ☐ personal finance ☐ surf Internet ☐ Web publishing ☐ chat rooms ☐

other ☐

how often? less than once in a week ☐ 1-2 times in a week ☐ 3-4 times in a week ☐

5 or more times in a week ☐

Technology in Your Classroom

13. Does your current school provide you with a computer for your personal use in the classroom?

Yes ☐ No ☐

13.1. If yes, does your computer have access to the Internet in your classroom?

Yes ☐ No ☐

14. Please, check from the following list all those technology resources available in your classroom:

___Teacher computer ___ TV ___VCR ___DVD ____Student computers

___Overhead projector ___Computer projector ___LaserDisc player ____CD/Cassette player

____Other. Please specify:_____

15. Does your school have a dedicated computer lab? Yes ☐ No ☐

15.1. If Yes, how many computers does it have for your students? ____ computers ____students

15.2. If Yes, how often do you take your students to the lab? ___Times a week ___Times a month

16. Have you ever used a computer to conduct lessons in your classroom? Yes ☐ No ☐

17. Do you integrate technology into your lessons whenever possible? Yes ☐ No ☐

18. On average, how many times per week do you use technology in your classroom lessons?

___ days a week ___never

PART 4. Time Preference for Live session

Every week, we will have live sessions in which we will meet face to face in an online platform (in WizIQ), learn some technological tools and have some discussions together. Which of these sessions do you prefer attending?

Thursday (from 8.00 p.m.- 9.00 p.m.) ☐

Sunday (from 2 p.m-4 p.m.) ☐

PART 5. INTERVIEW

Would you be willing to participate in an interview (in Turkish) at a time you choose between December 2 and 9, 2013 (next week)?

Yes ☐ No ☐

If yes, would you prefer it to be online or face to face?

Online ☐ Face to face ☐

Note: If face-to-face, the interviewer will visit your school.

MANY THANKS FOR YOUR PARTICIPATION ☺

APPENDIX D: Post-interview Questions for the Teachers Completing the Study (In Turkish)

The following are the interview questions for those completing the training.

1) Eğitim boyunca zorluklarla karşılaştınız mı? Bu zorluklar nelerdi? Bu zorluklarla nasıl mücadele ettiniz?
2) Eğitimi bırakmayı hiç düşündünüz mü? Düşündüyseniz nedenlerini açıklayınız.
3) Online eğitimin başında kendinizi online bir ders için ne kadar hazır hissediyordunuz? Online bir eğitimi başarıyla tamamlayabileceğinizi düşünüyor muydunuz? Neden?
4) Online eğitime hazır oluşunuzu ne gibi aktiveteler kolaylaştırırdı? Bu konuda önerileriniz var mı?
5) Eğitimin içeriğini (haftalık işlenen konuları) nasıl buldunuz? Eğitimde öğrendiğiniz teknolojik araçları dil öğretmek amacı için ne kadar alakalı buldunuz?
6) Eğitim, yeni teknolojik araçlar öğrenmenize ne kadar katkı sağladı?
7) Edmodo kullanma deneyiminizi nasıl tarif edersiniz?
   a) Kullanırken zorluk yaşadınız mı? Bunlar nelerdi?
   b) Öğrencilerinizle kullandınız mı? Nasıl bir deneyimdi? Kullanmadıysanız kullanmayı düşünür müsünüz? Hangi amaçlar için kullanmayı düşünürsünüz?
   c) Öğrencilerinizle kullanmak için kendinizi yeterli hissediyor musunuz?
   d) Edmodoyu, sınıf içi iletişimi sağlamakta ne kadar etkili buldunuz?
   e) Ders içeriği veya kullandığınız teknoloji ile ilgili sorularınızı Edmododa paylaştınız mı? Edmododa paylaşımda bulunmanızı veya bulunmamanızı neler etkiledi?
8) WizIQ kullanma deneyiminizi nasıl tarif edersiniz?

How would you describe your experiences of using WizIQ?

a) Kullanırken zorluk yaşadınız mı?
b) Öğrencilerinizle kullanma şansınız olsa kullanır mıydınız? Kullanmayı düşünüyor musunuz?
c) Öğrencilerinizle kullanmak için kendinizi yeterli hissediyor musunuz?
d) WizIQ'i, sınıf içi iletişimi sağlamakta ne kadar etkili buldunuz?

9) Ceyda ve Sedat hocayı eğitmen olarak nasıl buldunuz? How did you find the trainers? Eğitmenlerin
   - Ders içeriği ile ilgili sundukları desteğin başarılı ve yetersiz bulduğunuz yönleri nelerdir?
   - Teknolojik destek sağlamakta başarılı ve yetersiz bulduğunuz yönleri nelerdir?
   - Geribildirim vermekte başarılı ve yetersiz bulduğunuz yönleri nelerdir?
   - Sınıf içi iletişimi sağlamakta başarılı ve yetersiz bulduğunuz yönleri nelerdir?
   - İletişim araçlarını (örneğin; e-posta, Edmodo, WizIQ) kullanmakta başarılı ve yetersiz bulduğunuz yönleri nelerdir?
   - Bunlardan başka bir konuda desteğe ihtiyacınız oldu mu? Bu ihtiyaçlarınız ne oranda karşılandı?
10) Bundan sonra başka online eğitimlere katılmaya gönüllü olur musunuz? Neden?

11) Bu eğitimle ilgili faydalı bulduğunuz şeyler neler oldu?

12) Bu eğitimle ilgili eksik bulduğunuz ya da daha iyi olabileceğini düşündüğünüz şeyler neler oldu?

13) Haftalık ödevleri içerik ve iş yükü açılarından nasıl değerlendiriyorsunuz?

14) Teknolojik problemleri ya da dersle ilgili sorularınızı eğitmenlerle ya da diğer katılımcılarla Edmodo'da, WizIQ'de ya da e-mail yoluyla paylaştınız mı? Paylaştıysanız hangi konularda paylaştınız? Paylaşmadıysanız nedenleri nelerdir?

15) Diğer öğretmen katılımcılarla olan iletişiminizi nasıl değerlendiriyorsunuz? Bu eğitimde kendinizi bir topluluğun üyesi olarak hissettiniz mi? Bu düşüncenizi neler etkiledi?

16) Online bir eğitimi başarıyla tamamladınız. Katıldığınız bu online eğitimi ilk defa alacak olan bir katılımcıya ne gibi önerilerde bulunursunuz?

17) Bu eğitimde öğrendiğiniz teknolojik araçları derslerinizde kullanmayı düşünüyor musunuz? Nasıl? Kullanmayı düşünmüyorsanız nedenleri nelerdir?

18) Bu eğitim sonrasında teknolojinin dil eğitiminde kullanımı üzerine mesleki gelişiminizi devam ettirmeyi düşünüyor musunuz? Nasıl?

19) Online eğitimde kullandığımız aşağıdaki iletişim araçlarının eğitmen-katılımcı ve tüm katılımcılar arasında daha iyi bir iletişim sağlamakta ne kadar etkili olduğunu düşünüyorsunuz?

e-mail:
wiki:
Edmodo:
WizIQ:
Blog:
Cep telefonu:

20) Her hafta blogda rapor yazma aktivitesini nasıl buldunuz? Herhangi bir katkısını gördünüz mü?
21) Online eğitimde yüz yüze olan eğitime göre beğendiğiniz ya da beğenmediğiniz şeyler neler oldu? Bundan sonra teknoloji ile igili bir eğitim alırsanız, bu eğitimin online mı yoksa yüz yüze mi olmasını tercih edersiniz? Neden?
22) Eğitimdeki teori pratik dengesini nasıl buldunuz? Teori ya da pratiğe daha fazla ağırlık verilmesinin daha iyi olacağını düşünüyor musunuz? Neden

Post-Interview Questions for the Teachers Completing the Study (In English)

1) Have you ever encountered any difficulties during the training? What were these difficulties? How did you cope with these difficulties?
2) Have you ever considered leaving the study? If yes, what are the reasons?
3) How ready did you feel yourself for an online training at the beginning of the training? Did you believe you can complete the training successfully? Why?
4) What kinds of activities do you believe would enable you to feel more ready for the online training? Do you have any suggestions for this?
5) What do you think about the weekly content of the training? How relevant do you think the content is for your needs related to teaching English via technology?
6) To what extent do you believe the training enabled you to get to know new CALL tools?
7) How would you describe your experiences of using Edmodo?
    a) Have you experienced any difficulties? If yes, what were these difficulties?
    b) Have you used Edmodo with your students? If yes, how was your experience? If not, do you plan to use? In what ways?
    c) Do you perceive yourself competent enough to use Edmodo with your students?

d) How effective do you believe Edmodo was fostering interaction among the participating teachers?

e) Have you posed any questions related to technical problems or course content in Edmodo? If yes, what kinds of questions did you ask? If not, why did you not?

8) How would you describe your experiences of using WizIQ?

a) Have you experienced any difficulties? If yes, what were these difficulties?

b) Have you used WizIQ with your students? If yes, how was your experience? If not, do you plan to use? In what ways?

c) Do you perceive yourself competent enough to use WizIQ with your students?

d) How effective do you believe WizIQ was fostering interaction among the participating teachers?

9) To what extent do you believe the trainers were successful at providing

-support related to the course content

- technical support

-feedback

-an interactive learning environment to the participating teachers

and using the communication tools?

Did you need any support other than these? To what extent were these needs met?

10) Would you volunteer to attend other online trainings from now on? Why?

11) What features of the training do you believe was beneficial for you?

12) What features of the training do you believe can be improved about the training?

13) What do you think about the content and workload of the weekly tasks?

14) Have you shared the technical problems or your questions related to the course content in Edmodo, WizIQ or via e-mail? If yes, what were the questions mostly about? If not, what were the reasons of not sharing?

15) How do you rate the level of communication between you and the other participating teachers? Did you feel yourself as part of a learning community during the training? What affected this feeling?

16) You completed the online training successfully. Do you have any suggestions for the teachers who will receive this training for the first time?

17) Do you plan to use the CALL tools you learnt in this training in your own classroom? How? If not, why not?

18) Do you plan to perpetuate your professional development in the field of CALL ensuing this training? How?

19) To what extent do you believe the following communication tools we used during the training yielded success at fostering interaction between the trainer-teachers and among the teachers?

e-mail:
Wiki:
Edmodo:
WizIQ:
Blog:
Mobile phone:

20) Do you believe writing reflection reports in your blog was beneficial for you in any way? If yes, in what ways? If not, why not?

21) What did you like or not like about the online training compared to face-to-face training? If you receive a training about technology in the future, would you prefer it to be online or face-to-face? Why?
22) What do you think about the weight of the emphasis put on theory and practice during the training? Would you like to have more emphasis on the theory or practice? Why?

Post-interview Questions for the Teachers Leaving the Study (In Turkish)

The following are the interview questions for those who did not complete the training.

1) Eğitim boyunca zorluklarla karşılaştınız mı? Bu zorluklar nelerdi? Bu zorluklarla nasıl mücadele ettiniz?
2) Online eğitimin başında kendinizi online bir ders için ne kadar hazır hissediyordunuz? Online bir eğitimi başarıyla tamamlayabileceğinizi düşünüyor muydunuz? Neden?
3) Online eğitime hazır oluşunuzu ne gibi aktiviteler kolaylaştırırdı? Bu konuda önerileriniz var mı?
4) Teknolojinin dil öğretiminde kullanımı üzerine olan bu eğitimin online mı yüzyüze mi olmasını tercih ederdiniz? Neden?
5) Eğitimi tamamlamamanızda etkili olan etmenler nelerdir?
6) Bu eğitimle ilgili eksik bulduğunuz ya da daha iyi olabileceğini düşündüğünüz şeyler neler oldu?
7) Bu eğitimle ilgili faydalı bulduğunuz şeyler neler oldu?

Post-interview Questions for the Teachers Leaving the Study (In English)

1) Have you ever encountered any difficulties during the training? What were these difficulties? How did you cope with these difficulties?
2) How ready did you feel yourself for an online training at the beginning of the training? Did you believe you can complete the training successfully? Why?
3) What kinds of activities do you believe would enable you to feel more ready for the online training? Do you have any suggestions for this?
4) Would you prefer this training, which is about the use of technology in language teaching to be face-to-face or online? Why?
5) What are the reasons for your leaving the training?
6) What do you think was insufficient or can be improved about the training?

7) Have you learnt anything from the training? If yes, which features of the training have been beneficial for you?

APPENDIX E: Invitation Letter

Değerli Öğretmenler,

Orta Doğu Teknik Üniversitesi Yabancı Diller Eğitimi Bölümü akademik personeli tarafından bir yüksek lisans tezi kapsamında, Milli Eğitim Kurumlarında ortaöğretim düzeyinde (9,10,11,12. sınıflar) çalışan İngilizce öğretmenlerine dil öğretiminde teknoloji kullanımına yönelik bir eğitim verilecektir. 4 hafta sürecek olan bu eğitim, online olacaktır ve öğretmenlerin yeni teknolojik uygulamaları tanıyıp, dil öğretimi amaçlarında kullanmalarını sağlamayı hedeflemektedir. Katılım siz öğretmenlerin gönüllüğüne dayanmaktadır. Eğitimi başarıyla tamamlayan öğretmenlere, Orta Doğu Teknik Üniversitesi Yabancı Diller Eğitimi Bölümü tarafından katılım sertifikası verilecektir. Haftalık program ve öğretmenlerin haftalık dahil olacakları aktiviteler aşağıda verilmektedir. Katılımınızı bildirmek için ceyda@metu.edu.tr adresi ile veya telefon yoluyla (0312 210 36 28) iletişim sağlayabilirsiniz.

1. Hafta

-Introduction to Computer Assisted Language Learning

-Creating and Using Blogs in Teaching Language (Blogger and Wordpress)

-Using RSS Reader

2. Hafta

- Online Communities of Practice – Creating and Joining Online Groups (Webheads, APACALL, Facebook groups, Yahoogroups, Googlegroups)

- Online Conference Tools (WizIQ)

-The use of wikis in English Language Classrooms (Pbworks, Wetpaint**,** Google Documents)

3. Hafta

-Mobile Learning (tablet PCs, cell phones)

- Computer Mediated Communication (CMC) (Synchronous and Asynchronous) – Message Boards , Forums, Instant Messaging Services (MSN Messenger, Yahoo Messenger, Google Talk, Skype, Facebook, Twitter)

- Creating and publishing a web page

4.Hafta

- Online Presentation Tool (prezi)

- Digital Storytelling

- Podcasts

Aktiviteler

Yukarıda belirtilen eğitim, öğretmenlerin haftalık en fazla 3 saatini alacak aktivitelere dahil olmalarını gerektirmektedir. Bu aktiviteler, her hafta öğretmenlerin online bir ortamda buluşup 1 saat canlı konferans yapmalarını, öğrendikleri teknolojik uygulamaları uyguladıkları taskler yapmayı, onlar üzerine tartışmayı ve öğrendikleri üzerine reflectionlar yazmayı gerektiren yaklaşık olarak 2 saatlerini alacak aktivitelerden oluşmaktadır.

Saygılarımla

Orta Doğu Teknik Üniversitesi Yabancı Diller Eğitimi Bölümü

Araş. Gör. Behice Ceyda Cengiz

e-posta: ceyda@metu.edu.tr

Tel: 0 312 210 36 28

APPENDIX F: Weekly Tasks

Pre-training (November 25-December 1)

In pre-training, it is advisable that you do the following before Week 1.

1- To be a member of our class in Edmodo called 'Technology for Teaching English',

- go to https://edmo.do/j/beeqqw
- sign up for free (Steps: 1- Choose: I am a teacher 2- Choose a title, write your name, surname, e-mail, password, tick the box, join)
- join the class

2- To attend the live session in WizIQ, you will be sent an e-mail with a link on December,2. Click the link and attend the class of the live session.

3- You will be e-mailed a survey which aims to uncover more info about you (e.g., where you are from,your year of teaching, familiarity with technology etc.). E-mail it back to ceyda@metu.edu.tr when you complete it.

Week 1 (December 2-8, 2013): First introductions and getting started

CHECKLIST: Please, consider the objectives below as a checklist and make sure that you have done all of the following until the deadline of Week 1 tasks. (Deadlines are in the navigator menu in the right)

Objectives of Week 1: By the end of Week 1, you will have .....

- Joined Edmodo and introduced yourself
- Joined WizIQ
- Attended live session in WizIQ
- Completed a survey
- Read an article
- Created your own blog
- Gotten a Feedly account
- Written a reflection report

Task 1: Joining WizIQ

You can do this task on the session day (Thursday or Sunday). It is advisable that you go to these links before the session starts (fifteen minutes earlier). On SESSION DAY, click launch to attend the session.

Thursday Session: Go to http://www.WizIQ.com/online-class/1521525-week-1-live-class and become a member of the live session which will be held on Thursday at 8 p.m. (December 5, 2013)

Sunday Session: Go to http://www.wiziq.com/online-class/1521533-week-1-live-class-on-sunday and become a member of the live session which will be held on Sunday at 2 p.m. (December 8, 2013)

Task 2: Attending the live session in WizIQ

Content of the session:

- Teachers will hold a discussion on the use of technology in language classes answering the following questions.

- Is the use of technology needed in language classrooms. Why?
- What kinds of technological tools are they using in their classes?

- Teacher trainers will show you how to create a blog page and use its main features.
- Teacher trainers will give some suggestions on how language teachers can use blogs in their classess.
- Teacher trainers will show you how to create a Feedly account.

Task 3: Joining Edmodo and Introducing Yourself there

Go to Pre-training and become a member of our class in Edmodo by going to https://edmodo.com and to find our class, use our group code, which is wi3amt
Under the post called "Introduce yourself", write a few things about yourself and your expectations from this training. You can follow this structure: 3 Personal Things about me (name, the instituion you work, the level your are teaching) 2 things about my students,1 thing I want to improve in my teaching My expectations from this session are .....

Task 4: Readings

Read the article on digital natives and immigrants.While describing your learners in the above task in Edmodo, you can refer to the article if it applies. Click here to download the article.

Task 5: Survey

If you have already done this task in Pre-training, skip this task. If not, fill in the survey that was sent to you by e-mail. This survey aims to uncover more info about you (e.g., where you are from,your year of teaching, familiarity with technology etc.) so that we can get to know each other better.

Task 6: Creating your own blog

Create your own blog with Wordpress and post the link to your blog in Edmodo. Your blog can have any content (e.g., about your personal life, professional life, etc.)

Task 7: Getting a Feedly account

Get a Feedly account and add the other teachers' blog pages to your RSS reader list. The instructions for getting a Feedly account will be given in the live session.

Task 8: Writing Reflection Report 1 in your blog

In your blog page, reflect on Week 1 by referring to the following questions. It is enough that you write one paragraph in total.
- Have you benefited from Week 1? What have you learnt?
- Do you think you will apply what you learnt in Week 1 to your classes? If yes, how? If no, why?
- Which technological tools do you think is difficult or not possible for you to apply in your classes? Why?

Week 2 (December 9-15, 2013): Getting connected to Online Communities

Objectives of Week 2 : By the end of Week 2, you will have .....

- Attended a live session in WizIQ
- Learnt about Online Communities of Practice

- Learnt Online Conference Tools
- Learnt the differences between Wikis and Google Docs
- Used WizIQ or Google Hangout with your students (if managable)
- Used Google Docs with your students (if managable)
- Written Reflection Report 2

Task 1: Attending the live session in WizIQ

The links for the sessions are as follows:

Thurday Session: http://www.wiziq.com/online-class/1541278-week-2-live-session-on-thursday
Friday Session: http://www.wiziq.com/online-class/1541285-week-2-live-session-on-friday

Content of the session:

- Teacher trainers will introduce Online Communities of Practice (Webheads and other groups in Facebook)
- Teacher trainers will introduce Online Conference Tools (WizIQ and Google Hangout) and make suggestions on the ways to use these in language classes.
- Teacher trainers will introduce some wiki tools (Pbworks, Wetpaint, Google Documents) by referring to their advantages and disadvantages.

Task 2: First hand experience with WizIQ or Google Hangout (optional: if managable in your context)

Organize a session on WizIQ or Google Hangout with your students. This can be done as an out-of-class activity.

Task 3: First hand experience with Google Docs (optional: if managable in your context)

Use Google Docs with your students in a writing class. This can be done in the class or as a out-of-class activity.

Task 4: Writing Reflection Report 2 in your blog (must)

In your blog page, reflect on Week 2 by referring to the following questions. It is enough that you write one paragraph in total. COPY the link of this post to our class in EDMODO so that all of us can read your comments.
- How was the session you had on WizIQ or Google Hangout with your students? What kind of activity did you have there? Was it effective? Did you encounter any difficulties? If yes, how did you manage them?
- Have you benefited from Week 2? What have you learnt?
- Do you think you will apply what you learnt in Week 2 to your classes? If yes, how? If no, why?
- Which technological tools do you prefer using and not using in your classes? Why?
- Which technological tools of this week do you feel yourself more and less competent in using your language classes?Why?

Week 3 (December 16-22, 2013): Communication tools in Technology

Objectives of Week 3 : By the end of Week 3, you will have .....

- Attended a live session in WizIQ
- Learnt some Mobile applications for Android and IOS operating systems
- Learnt how to use Computer Mediated Communication Tools (both synchronous and asynchronous) in language classes
- Created a website
- Revised Website Evaluation Rubric
- Written Reflection Report 3 in your blog

Task 1: Attending the live session in WizIQ

Content of the session:

- Teacher trainers will introduce some Mobile applications for Android and IOS operating systems that can be used in language classes
- Teacher trainers will make suggestions on how to benefit from Computer Mediated Communication Tools (both synchronous and asynchronous) in language classes

- Teacher trainers will introduce Weebly to illustrate how to create and publish a webpage

Task 2: Designing your own website or class site

Design your own website or a class site in Weebly. While creating a website or class site,

-give some personal info about YOURSELF (e.g., your name, the institution you work, your hobbies, etc.) OR about the CLASS you areTEACHING (e.g., the content of your classes, the topics you cover, the activities or exercises you use or websites you recommend your students to visit, etc.)
- put some pictures or videos in your website or class site
-you can add your students to your class site if you choose to create a class site

Task 3: Sharing the link to your website in Edmodo

Share the link to your website in Edmodo

Task 4: Revising Website Evaluation Rubric

To use a checklist for evaluating the quality of the websites you visit, revise the evaluation rubric here http://www.ccc.commnet.edu/library/webchecklist.htm

Task 5: Writing Reflection Report 3 in your blog

In your blog page, reflect on Week 3 by referring to the following questions. It is enough that you write one paragraph in total.
- Do you think mobile applications have an instructional value in language classes?Why? How can we use them in language classes?
- Have you benefited from Week 3? What have you learnt?
- Do you think you will apply what you learnt in Week 3 to your classes? If yes, how? If no, why?
- Which technological tools do you prefer using and NOT using in your classes? Why?
- Which technological tools of this week do you feel yourself more and less competent in using your language classes?

Week 4 (December 23-29, 2013) : Creating your own materials with technology

Objectives of Week 4 : By the end of Week 3, you will have .....

- Attended the live session inWizIQ
- Prepared a presentation with Prezi
- Created your own digital story
- Created your own podcast
- Filled in an evaluation survey
- Shared your presentation, digital story and podcast in Edmodo
- Written Reflection Report 4 in your blog

Task 1: Attending the live session in WizIQ

Content of the session:

- Teacher trainers will introduce Prezi as an online presentation tool
- Teacher trainers will introduce Windows Movie Maker and illustrate how to prepare a digital story telling
- Teacher trainers will introduce Audioboo (also its mobile app) and illustrate how to create podcasts

Task 2: Preparing a presentation with Prezi

For a vocabulary or grammar lesson, prepare a presentation with Prezi that you can use in your class.

Task 3: Creating your own digital story

Choose one unit in the textbook you use at school and create a digital story about the topic of that unit.

Task 4: Creating your own podcast

Create a 3 minute podcast. The topic is "What is your biggest ambition in life?"

Task 5: Sharing your presentation, digital story or podcast in Edmodo

Share your presentation, digital story and podcast in Edmodo so that others can also see them. (also borrow them if you allow them to do so)

Task 6: Filling in an Evaluation Survey

Fill in the Evaluation Survey and send it to ceyda@metu.edu.tr.

Task 7: Writing Reflection Report 4 in your blog

In your blog page, reflect on Week 4 by referring to the following questions. It is enough that you write one paragraph in total.

- Have you benefited from Week 4? What have you learnt?

- Do you think you will apply what you learnt in Week 4 to your classes? If yes, how? If no, why?

- Which technological tools do you prefer not using in your classes?

- Which technological tools of this week do you feel yourself more and less competent in using your language classes?

IMPORTANT NOTICE: You have the OPTION of doing only one of the following tasks (Task 2, 3 or 4) .

APPENDIX G: Syllabus

Date: December 2- 29, 2013

Training Description

This is a four-week online training for teachers of English to help them get familiar with various technology tools that they can use in their L2 English classes.

Objectives of the training

English teachers will have

- Been exposed to the following technological tools or settings:

- Blogs (Blogger and Wordpress)

- Wikis (Pbworks, Wikispace, Google Documents)

- RSS Reader

- Online Conference Tools (Google Hangout, WizIQ)

- Online Communities of Practise (Webheads, APACALL, Facebook groups, Yahoogroups, Googlegroups)

- Computer Mediated Communication (CMC) (Synchronous and Asynchronous) – Message Boards , Forums, Instant Messaging Services (MSN Messenger, Yahoo Messenger, Google Talk, Skype, Facebook, Twitter)

- Mobile Applications for Android and IOS Operating Systems

- Online Presentation Tool (prezi)

- Digital Storytelling

- Podcasts

- Participated in live sessions for one hour each week

- Had discussions in Edmodo (asynchronous setting)

- Written Reflection Reports in their blogs

Communication Tools

Pbworks: http://technologyforteachingenglish.pbworks.com (for the content of the training)

Edmodo: (for asynchronous discussion and sharing files)

WizIQ: (for live meeting)

APPENDIX H: Turkish Summary

GİRİŞ

Günümüzde teknoloji her yerde olup, günlük yaşamamızın önemli bir kısmını meşgul etmektedir. Teknolojiye ulaşımın gittikçe daha da kolaylaşmasıyla, eğitim alanı da teknolojinin öğrenme ve öğretme üzerine olan muhtemel katkılarını araştırma yoluna gitmiştir. Yabancı dil eğitimi alanı da bu alanlardan biri olmuş ve Bilgisayar destekli dil eğitimi (BDDE) adı altında, var olan her türlü bilgi teknolojilerinin dil öğretimindeki potansiyelinden yararlanma amacıyla bu alanda çeşitli araştırmalar gerçekleştirmektedir. Bu nedenle, Bilgisayar destekli dil eğitimi yabancı dil öğretimi alanında son zamanlarda çok önemli bir yer edinmeye başlamıştır. Hubbard'ın (2007) dile getirdiği gibi, "Bilgisayarlar mademki günlük yaşamımızın bir parçası haline geldi ve eğitimin diğer alanlarını da ele geçirdi, şu anki konumuz bilgisayar kullanıp kullanmamayı değil nasıl kullanacağımızı tartışmaktır." (sf, 1). Teknoloji dil sınıflarında eşsiz bir yer edinmiş ve Warschauer (1998) tarafından da ifade edildiği gibi nasıl kitap, kalem, kütüphane destekli dil öğretimi kavramları yoksa bir gün bilgisayarlar dil sınıflarının öyle görülmez parçaları olacak ki bizler bilgisayar destekli dil öğretimi diye bir kavram da kullanmıyor olacağız.

Bilgisayar destekli dil eğitiminin dil öğretimi için faydaları birçok araştırmacı tarafından dile getirilmiştir. Prensky (2001), örneğin, "Günümüz öğrencileri ciddi olarak değişmiştir. Bugünün öğrencileri eğitim sistemimizin alışık olduğu öğretme tarzına uygun değillerdir" (sf.1) diyerek dil eğitiminde teknoloji kullanmanın önemine işaret etmiştir. Çağımız çocukları teknolojiyi günlük yaşamda yoğun bir şekilde kullanmaktadır. Bu sebeple şüphesizdir ki yabancı dil öğretimi alanının önemli amaçlarının bir tanesi de teknolojiyi dil öğretimi için etkili bir şekilde kullanmanın yollarını aramaktır.

Dil sınıfında teknoloji kullanımın çok çeşitli faydaları vardır. Bunlardan biri, yabancı dil konuşan insanlara erişim imkanı tanımasıdır. İngilizcenin ana dil olmadığı bir

ülkede dil öğrenmek dil öğrenenler için zorluklarla doludur. Dört dil becerisi arasında özellikle konuşma becerisine birkaç ders saatiyle kısıtlı dil derslerinde yeterince yer verilememektedir. Teknoloji, dünyanın farklı yerlerinden dil kullanıcılarını dil sınıflarına bağlamakta iyi bir araç olarak kullanılabilir. Bilgisayar destekli dil öğretiminin diğer ayırt edici özelliklerini, Egbert, Paulus ve Nakamichi (2002) şöyle açıklamaktadır:

"Başarılı bir şekilde uygulandığında, Bilgisayar destekli dil öğretimi teknolojileri deneyimsel öğrenmeyi destekler, çeşitli şekillerde pratik yapma şansı sağlar, öğrencilere etkili geri dönüt, grup çalışması imkanı sağlar, keşif ve küresel öğrenmeyi teşvik eder, öğrenci başarısını arttırır, otantik materyallere erişimi sağlar, daha fazla etkileşim imkanı sağlar, öğretimi bireyselleştirir, tek bir bilgi kaynağından bağımsızlık sağlar ve öğrencileri motive edebilir" (sf. 109).

Bilgisayar destekli dil öğretiminin yukarıda bahsedilen önemine karşın, yapılan araştırmalar göstermiştir ki bu teknolojileri sınıflarında kullanabilme yeterliliğine sahip İngilizce öğretmenleri sayıca oldukça azdır ve teknoloji kullanan öğretmenlerin kullanımı da birkaç araç ile sınırlıdır (Akcaoğlu, 2008; Lam, 2000; Yunus, 2007). Eğitim fakültelerinden mezun çoğu öğretmen, bu eğitimleri sırasında sınıflarında teknolojiyi etkili bir şekilde kullanmak üzerine eğitim almamışlardır (Kessler, 2007) ve bu durum hem ulusal hem uluslararası çalışmalarda böyle gözükmektedir. Hizmetiçi eğitimler de miktar ve kalite açısından öğretmenlerin ihtiyaçlarını karşılayamamaktadır (Top, 2007). Bunların yanı sıra öğretmenler sınıflarında teknoloji kullanmalarını engelleyen birçok etmenle karşı karşıya kalmaktadır.

Bilgisayar destekli dil öğretimi konusunda öğretmenlere eğitim sunmak amacıyla çeşitli yaklaşımlar geliştirilmiştir. Hubbard (2008)'a göre bunlar: "genişlik", "derinlik", bütünleşmiş" ve "çevrimiçi" yaklaşımlarıdır. Genişlik yaklaşımı, çeşitli bilgisayar destekli dil öğrenme araçlarının geniş bir yelpazede sunulduğu, hem teknik hem de pedagojik becerilere odaklanan bilgisayar destekli dil eğitimi üzerine olan eğitim olarak tarif edilebilir. Derinlik yaklaşımı, öğretmenlere bilgisayar destekli dil öğretimi alanındaki tek bir aracı yoğun bir şekilde öğretmeye çalışır. Bütünleşmiş

yaklaşım, öğretmen eğitimi programlarında öğretmenlerin çeşitli derslerde çoklu kez teknoloji kullandıkları bir yaklaşımdır. Son olarak, adından da anlaşılacağı gibi, çevrimiçi yaklaşım internet üzerinden verilir ve "pratik nedenlerle" (sf.182) tercih edilir.

Bu çalışma da bilgisayar destekli dil öğretimi ve öğretmen eğitiminin kaynaştığı noktada, dil öğretmenlerine verilen çevrimiçi bir hizmet-içi eğitiminin öğretmen görüşleri açısından incelemekte, onların sınıflarında teknoloji kullanmalarını engelleyen etmenleri ve son zamanlarda ülke çapında eğitim alanında yapılan Fatih Projesi adındaki bir teknoloji projesi hakkındaki görüşlerini açığa çıkarmayı hedeflemektedir.

Bu amaçla, çalışma aşağıdaki sorulara cevap bulmayı amaçlamaktadır.

1. Bir grup Türk İngilizce öğretmeni sınıflarında teknolojiyi ne derece kullanıyorlar?
2. Bu öğretmenlerin teknoloji kullanımlarını etkileyen etmenler nelerdir?
3. Öğretmenlerin çevrimiçi hizmetiçi bilgisayar destekli dil eğitimi üzerine aldıkları eğitim hakkındaki görüşleri nelerdir?
4. Bazı öğretmenlerin eğitimi bırakma sebepleri nelerdir?
5. Eğitimi tamamlayan öğretmenler eğitimde öğrendikleri araçları ne derece sınıflarında uygulayabileceklerine inanmaktadır?
6. Bu inançlarını etkileyen faktörler nelerdir?

2. ALAN YAZIN TARAMASI

2.1. Teknoloji Kullanımını Etkileyen Etmenler

Teknoloji kullanımını etkileyen faktörler çeşitli ulusal ve uluslararası çalışmalarda yerini bulmuştur. Bir özet halinde sunmak gerekirse bu etmenler, *zaman baskısı* (Lam, 2000; Levy, 1997; Meskill, Anthony, Hilliker-VanStrander, Tseng, & You, 2006; Reed Anderson, Ervin, & Oughton, 1995; Smerdon, Cronen, Lanahan, Anderson, Iannotti, & Angeles, 2000; Strudler,Quinn, McKinney, & Jones, 1995), *kaynak ve materyal azlığı* (Adelman ve diğerleri, 2002; Cuban, 2001; Egbert ve

diğerleri, 2002; Hadley & Sheingold, 1993; Loehr, 1996; Rosen & Weil, 1995), *eğitim ve teknik destek* (Abdal-Haqq, 1995; Albirini, 2004; Bradley & Russell, 1997; Lam, 2000; Langone, Wissick, Langone, & Ross, 1998; Larner & Timberlake, 1995; Levy, 1997; NCES, 2000; Penuel, 2006; Preston, Cox, & Cox, 2000; Russell & Bradley, 1997), *yetersiz teknoloji standartları veya müfredatı* (Langone ve diğerleri, 1998), *teknolojiye karşı tutum ve kullanabilme konusunda özgüven* (Fisher, 1999; Karakaya, 2010; Lam, 2000; Yuen & Ma, 2002; Zhao & Frank, 2003), *teknoloji üzerine eğitim alma deneyimi* (Egbert ve diğerleri, 2002; Hernández-Ramos, 2005; Hong 2009, 2010), *okuldaki teknoloji kullanımı veya okul iklimi* (Hadley & Sheingold, 1993; Hong 2009, 2010; Rosen & Weil, 1995; Winnans & Brown, 1992), *öğretmenlerin teknolojinin öğretimdeki önemine olan inancı* (Ertmer,1999; Knezek, Christensen, & Rice, 1996; Lam, 2000; Penuel, 2006) ve *meslektaş desteği* (Garet, Porter, Desimone, Birman, & Yoon,2001) olarak bulunmuştur.

Şüphesiz ki öğretmenlerin sınıflarında teknoloji kullanmalarını sağlamak için bu etmenlerin öğretmenlerin öğretme ortamlarında karşılanıp karşılanmadığı tespit edilmeli ve bu tespit üzerine teknoloji uygulamaları için elverişli bir ortam öğretmenlere sunulmalıdır. Bu amaçla, öğretmenlerin teknoloji kullanmalarını sağlamak üzerine verilen eğitimler, öğretmenlerin teknoloji kullanma ortamları ile ilgili veriye sahip olmalıdır. Bu çalışma da öğretmenlerin teknoloji uygulamalarını çok yönlü bir süreç olarak değerlendirmekte ve verilen teknoloji eğitiminin yanı sıra teknoloji kullanımını etkileyen faktörleri de incelemektedir

2.2. Fatih Projesi ile İlgili Çalışmalar

Fatih projesi, (Fırsatları Artırma ve Teknolojiyi İyileştirme Hareketi) okulları en modern teknolojik araçlarla donatarak teknolojiyi Türk eğitim sistemine yerleştirmeyi hedefleyen, Milli Eğitim Bakanlığının en önemli ve güncel yatırımlarından biridir. (Akcaoğlu, Gumuş, Bellibas, & Boyer, 2014). Proje, eğitimde fırsat eşitliği oluşturmayı ve okullardaki teknik altyapıyı geliştirmeyi amaçlamaktadır (Fatih Projesi, 2014). Bilgi ve iletişim teknolojilerinin öğretmenler ve öğrenciler

tarafından bilinçli bir şekilde kullanılması projenin diğer amaçları arasında bulunmaktadır (Bilici, Akdur, Yildizbasi, Gunday, & Cicek, 2011).

Her teknoloji uygulamasında olduğu gibi, Fatih projesinin etkili bir şekilde kullanılmasında da öğretmenler büyük rol oynamaktadır (Akıncı, Kurtoğlu, & Seferoğlu, 2012; Kayaduman, Sırakaya, & Seferoğlu, 2011). Bu sebeple birçok araştırmacı öğretmenlerin Fatih Projesine olan tutumlarını araştırmıştır. Çeşitli araştırmalar, genelde öğretmen tutumlarını olumlu bulmuştur (Akcaoğlu ve diğerleri, 2014; Çiftçi, Taşkaya, & Alemdar, 2013; Dündar & Akçayır, 2014; Koçak, 2013; Sayır, 2014). Öğretmenlerin projeyi destekleme sebepleri genelde, dersleri daha görsel hale getirmesi ve öğrenciler için daha ilginç kılması olmuştur (Akcaoğlu ve diğerleri, 2014; Banoğlu, Madenoğlu, Uysal, & Dede, 2014; Çiftçi ve diğerleri, 2013; Daşdemir, Cengiz, Uzoğlu, & Bozdoğan, 2012; Pamuk, Çakır, Ergun, Yılmaz, & Ayas, 2013; Şad & Özhan, 2012; Yeni-Palabıyık, 2013).

Öğretmenlerin genel olarak projeye karşı olumlu tutumuna karşın, birçok öğretmen proje ile ilgili birçok soruna işaret etmiştir. Bu sorunlar; akıllı tahta ve tabletler arasındaki bağlantı eksikliği (Akcaoğlu ve diğerleri, 2014), bu araçlar ile kullanılacak materyal eksikliği ve öğretmenlerin materyal hazırlamada kendilerini yeterli hissetmemeleri (Banoğlu ve diğerleri, 2014; Çetinkaya & Keser, 2014; Dursun, Kuzu, Kurt, Güllüpınar, & Gültekin, 2013), tabletlerde öğretmenlerin kullanımı için kontrol mekanizması eksikliği (Çetinkaya & Keser, 2014), tabletlerdeki yazılım ve donanımın yetersizliği ve teknik sorunlar (Akcaoğlu ve diğerleri, 2014; Çetinkaya & Keser, 2014; Gürol, Donmuş, & Arslan, 2012; Koçak, 2013; Sayır, 2014; Türel, 2012), bazı sitelere erişimin yasak oluşu ve internet bağlantısının sürekli olmayışı (Çetinkaya & Keser, 2014) gibi durumlardan oluşmaktadır. Öğrencilerin tabletleri oyun gibi ders dışı aktiviteler için kullanıyor olması da öğretmenleri rahatsız eden bir diğer sorunlardan birisidir (Pamuk ve diğerleri, 2013; Özdemir & Bozdoğan, 2013).

Öyle gözükmedir ki bu sorunlar sebebiyle proje araçlarının çok yönlü özelikleri yeterince etkili kullanılamamaktadır. Araştırma sonuçları birçok öğretmenin

derslerinde öğretim amaçlı proje araçlarından yeterince faydalanamadıklarını göstermektedir (Kurt, Kuzu, Dursun, Güllüpınar, & Gültekin, 2013; Pamuk ve diğerleri, 2013; Şad & Özhan, 2012. Oysaki projenin başarısı için bu problemlerin çözümüne ihtiyaç vardır. Çünkü alan yazın göstermiştir ki teknolojik sorunlar her zaman öğretmenlerin teknoloji uygulamalarında engelleyici bir faktör olarak rol oynamıştır.

Yeni bir teknoloji projesi olarak Fatih projesi öğretmenlerin projeyi etkili bir şekilde kullanabilmeleri için onlara hizmet-içi eğitim sunmaktadır. Fakat çeşitli çalışmalarda dile getirildiği üzere bu eğitimler öğretmenlerin ihtiyaçlarını yeterince karşılayamamaktadır ve hizmetiçi eğitimlerin iyi bir kalitede ve sürekli olarak öğretmenlere sunulmasına gereksinim vardır (Akcaoğlu ve diğerleri, 2014; Akıncı ve diğerleri, 2012; Banoğlu ve diğerleri, 2014; Sayır, 2014; Yeni-Palabıyık, 2013).

2.3. Bilgisayar Destekli Dil Eğitimi Üzerine Hizmet-içi Öğretmen Eğitimi

Alan yazında bilgisayar destekli dil eğitimi üzerine hizmet-içi öğretmen eğitimi birçok çalışmada yer almaktadır (Arnold, Ducate & Lomicka, 2007; Chao, 2006; Jones & Youngs, 2006; Olesova & Meloni, 2006; Rickard, Blin & Appel, 2006; Wong & Benson, 2006; Youngs, 2007). Bu çalışmalarda araştırmacılar öğretmen eğitimine karşı farklı yaklaşımlar ve süreçler benimsemişlerdir (Hubbard, 2008). Meskill ve arkadaşları (2006), örneğin, hizmetiçi öğretmenlerin sınıf ortamlarında, öğretmen adayları ve doktora öğrencileri ile uzman yeni öğrenen danışmanlığı modeliyle bilgisayar destekli dil eğitimi üzerine aldığı eğitimden bahsetmiştir. Sonuçlar, hem hizmetiçi öğretmenlerin, öğretmen adaylarının hem de doktora öğrencilerinin bu karşılıklı danışma sürecinden faydalandığını göstermiştir. Benzer bir şekilde, Cutrim Schmid ve Hegelheimer (yayında) hizmetiçi öğretmenlerin sınıf ortamlarında teknoloji kullanma deneyimlerini öğretmen adayları ile paylaştığı ve öğretmen adaylarının bilgisayar destekli dil öğretimi üzerine bu sınıflarda araştırma yaptığı bir çalışmaya sahiptir. Bu çalışmalarda öne çıkan tema, bu eğitimlerin öğretmenlerin sınıf ortamları içinde gerçekleşmesi ve öğretmenlere gerçeğe ve uygulamaya dayalı bir eğitim sunmasıdır.

Rickard ve arkadaşları (2006) ise teknolojiyle aşina öğretmenlere kendi okullarındaki diğer öğretmenleri yetiştirmeleri için eğitim veren ülke çapındaki bir teknoloji eğitimini rapor etmiştir. Eğitim, öğretmenlere diğer öğretmenlerle ve eğiticilerle tartışma ve eğitimin içeriğini yerel öğretme ortamlarına göre ayarlama imkanı sağladığı için öğretmenler tarafından faydalı bulunmuştur.

Olesova ve Meloni (2006), Sibirya'daki İngilizce öğretmenlerine uzaklık faktörünü ortadan kaldırmak ve dil öğrencilerinin dünyanın diğer tarafları ile iletişimi artırmak için dil sınıflarında kullanılmak üzere İnternet projeleri geliştirme üzerine eğitim verilmiştir. Araştırma sonuçları, öğretmenlerin proje geliştirme konusunda özgüven kazandıklarını göstermiştir. Chao (2006) ise lisansüstü dersine kayıtlı hizmet-içi öğretmenlerin proje ödevi olarak nasıl ağ araştırması geliştirdiklerini anlatmıştır. Proje odaklı bilgisayar destekli dil öğretimi genel olarak faydalı olmuştur; fakat araştırmacı dersin yarısının proje oluşturmaya diğer yarısının da projeyi öğretmenlerin sınıflarında uygulamasına ayrılmasını önermiştir. Bu sonuç da teknoloji üzerine yabancı dil öğretmen eğitiminin öğretmenlerin sınıf ortamlarında gerçekleşmesi gerektiği inancını desteklemiştir.

Birkaç araştırmacı ise öğretmenlerin teknoloji kullanımı üzerine mesleki gelişimlerini sürekli olarak devam ettirebilmeleri için bu alanla ilgili olan, dünyanın her yerinden dil öğretmenlerinden oluşan uygulama topluluklarına katılmalarını önermiştir (Arnold ve diğerleri, 2007; Hanson-Smith, 2006; Hoven, 2007). Bu çalışma ise diğer çalışmalardan farklı bir yaklaşım benimseyip, çevrimiçi bir eğitimin hizmetiçi öğretmenlerin bilgisayar destekli dil eğitimini öğrenmeleri ve sınıflarında uygulayabilmeleri için ne kadar verimli olacağını öğretmenlerin bakış açıları yönüyle araştırmıştır. Bauer-Ramazani (2006) daha önce çevrimiçi eğitimi öğretmen adayları ile denemiştir. Egbert (2006) ise internet tabanlı bir platform ile hizmet-içi öğretmenleri ve öğretmen adaylarını iletişim kurmasını sağlayan ve öğretmenlerin sınıf ortamında uygulama yapmaları üzerine bir eğitimdir. Bu çalışmada ise, diğerlerinden farklı olarak, çevrimiçi eğitim sadece hizmet-içi öğretmenler için uygulanmaktadır.

3. ARAŞTIRMA YÖNTEMİ

Araştırma nitel bir yaklaşım benimseyip durum incelemesi olarak öne çıkmaktadır. Yin (2009)' e göre, durum incelemesine önemli bağlamsal koşullarla çevrili bir olayın derinleme incelenmesine ihtiyaç olduğunda gerek vardır. Durum incelemesi sınırlı bir sistemin incelenmesidir (Merriam, 1998). Bu çalışma da bir grup öğretmenin aldıkları teknoloji eğitimi ile ilgili deneyimlerini derinlemesine incelediği için bir durum incelemesi çalışmasıdır.

3.1. Katılımcı Özellikleri

Katılımcıları belirlemek için kolayda örnekleme metodu seçilmiştir. Çünkü eğitime katılım gönüllülük esasına dayanmaktadır. Katılımcı öğretmenler hakkında bilgi toplamak için öğretmenlere anket verilmiştir. Eğitime katılan ilk başta 12 öğretmen olup, bunlardan 4'ü daha sonra eğitimden ayrılmıştır. Eğitimi tamamlayan öğretmenden 7'si kadın, biri erkektir. Öğretmenlik deneyimleri 12 ile 32 arasında değişmektedir. Öğretmenler lise düzeyinde öğretmenlik yapmaktadırlar. 5'i İngiliz Dili Öğretmenliği bölümünden mezun olmuştur. Öğretmenlerden sadece 3'ü bilgisayar becerileri ile ilgili bir eğitim almıştır. Çoğu öğretmen eğitim teknolojisi ile ilgili bir ders ya da eğitim almamıştır. Okullarında Fatih Projesi uygulaması başlatılan öğretmenler eğitim ile ilgili kısa süreli bir eğitim almışlardır.

Öğretmenlerden sadece 3'ünün sınıflarında hem bilgisayar hem internet vardır. Öğretmenlerin yarısının okullarında bilgisayar labı yoktur. Sınıfta teknoloji kullanımı konusunda 3 öğretmen sınıfta hiç teknoloji kullanmadıklarını belirtmişlerdir.

Ayrılan öğretmenlerin hepsi, ilkokulda öğretmenlik yapan bir öğretmen haricinde lise düzeyinde çalışmaktadır. Öğretmenlerden 3'ü eğitim teknolojisi ile ilgili bir ders ya da eğitim almadığını belirtmiştir. Bu öğretmenlerin sınıflarında bilgisayar ve internet bulunmamaktadır.

3.2. Çevrimiçi Öğretmen Eğitiminin Dayandığı Teoriler

Çevrimiçi eğitim, İngilizce öğretmenlerini çeşitli bilgisayar destekli dil öğretimi araçlarını öğrenmelerini ve bu konuda hem teknik hem de pedagojiye yönelik yetenek geliştirmelerini hedeflemektedir. Bu amaçla, eğitmenlerin gösterdiği uygulamalar, öğretmenlerin birebir uygulama yapmasını gerektiren görevler ve öğretmenler arası yapılan tartışmalarla, eğitim yapılandırmacı yaklaşım üzerine oturmuştur. Ayrıca çevrimiçi eğitimin dizayn edilmesinde Çağıltay, Graham, Lim, Craner ve Duffy'nin (2001) çalışmasında öne sürülen 7 kural takip edilmiştir.

3.3. Eğitimde Kullanılan İletişim Araçları

Eğitimin içeriği, iletişim araçları, haftalık ödevler gibi eğitim ile ilgili her türlü bilgi Pbworks adlı wiki sayfasında duyurulmuştur. Katılımcı öğretmenler ile haberleşmek ve haftalık ödevleri hatırlatmak için elektronik posta kullanılmıştır. Canlı dersler sonrası iletişimi devam ettirmek, öğretmenlerin ödev teslim edebilecekleri ve görüş paylaşımı yapabilecekleri bir ortam olarak Edmodo kullanılmıştır. Çevrimiçi dersler WizIQ adlı internet tabanlı bir ortamda yapılmıştır. Ders sırasında tüm öğretmenler çevrimiçi olmuş ve bu ortamın kamera, mikrofon ve sohbet özelliklerinden faydalanmışlardır. Haftalık ödevlerden biri olarak, tüm öğretmenler ilk hafta oluşturdukları bloglara yansıtıcı düşünme raporları yazmışlardır. Son olarak, eğitmenlerin telefon bilgisi katılımcılarla paylaşılmış ve böylece bir iletişim aracı olarak kullanılmıştır.

3.4. Veri Toplama Araçları ve Analizi

Katılımcı öğretmenler hakkında genel bilgi toplamak için, öğretmenlere bir anket verilmiştir. Bu anket sadece demografik bilgi ve öğretmenlerin okul ortamlarında teknolojiye olan erişimleriyle ilgili maddeler içermektedir. Teknolojiye olan tutumları ve teknolojiyi sınıflarında uygulama konusundaki özgüvenleriyle ilgili maddeler de bulunmaktadır; fakat katılımcı sayısının azlığı sebebiyle bu veriler istatiksel bir analize tabi tutulmamıştır.

Asıl veri toplama araçları görüşme ve bloglarda yazılan yansıtıcı düşünme raporları olmuştur. Eğitimin ilk haftası öğretmenler sınıflarında teknoloji kullanımları ile ilgili

bir görüşmeye katılmışlardır. Eğitimin sonunda ise eğitim ile ilgili görüşlerini araştıran bir görüşmeye katılmışlardır. Öğretmenler eğitim boyunca her hafta bloglarında eğitimde öğrendikleri teknolojik araçları sınıflarında uygulama konusunda olan görüşlerini dile getirmişlerdir.

Nitel veriler içerik analizi yöntemi ile analiz edilmiştir.

4. Bulgular ve Tartışma

4.1. Öğretmenlerin Teknoloji Kullanımları

Öğretmenlerin teknoloji kullanımı ile ilgili 4 kategori çıkmıştır. Bunlar: (a) öğretmenlerin kullandıkları teknolojik araçlar (b) bu araçlarla öğretilmek istenen dil becerileri (c) öğretmenlerin teknolojiyi kullanma sebepleri (d) öğretmenlerin teknoloji kullanımını etkileyen etmenler.

Sonuçlar, öğretmenlerin dil öğretmek için sadece sınırlı bir ölçüde teknoloji kullandıklarını göstermektedir. Teknoloji kullanımlarını etkileyen etmenler; alan yazında ortaya çıkarılan etmenlerle benzerlik göstermektedir. Teknolojik altyapının yeterli olmayışı (e.g., Adelman ve diğerleri, 2002; Chen, 2012; Cuban, 2001; Egbert ve diğerleri,2002; Hadley & Sheingold, 1993; Loehr, 1996; Meskill ve diğerleri, 2006; Mumtaz; 2000; Norris, Sullivan, Poirot, and Soloway, 2003; Pelgrum, 2001; Rosen & Weil, 1995; Sepehr & Harris, 1995; Yunus, 2007), teknik destek (e.g., Kılıçkaya, 2012; Mumtaz 2000; Somyürek, Atasoy & Özdemir, 2009; Top, 2007; Toprakci, 2006; Yunus, 2007; Weikart & Marrapodi, 1999) ve dijital materyal eksikliği, müfredatın teknoloji kullanmaya elverişli olmaması (Çağıltay, Çakıroğlu, Çağıltay, & Çakıroğlu, 2001; Egbert ve diğerleri, 2002; Kılıçkaya, 2012; Meskill ve diğerleri, 2006; Mumtaz, 2002; Top, 2007), hem teknik hem pedagoji üzerine yoğunlaşan hizmet-içi eğitim eksikliği (e.g. Arkın, 2003; Çağıltay ve diğerleri, 2001; Garet ve diğerleri, 2001; Goktaş, Yildirim & Yildirim, 2009; Hong, 2009, 2010; Kanaya, Light, & Culp, 2005; Karakaya, 2010; Kessler & Plakans, 2008; Lam, 2000; Moore, Morales and Carel, 1998; NCES, 2000; Penuel, 2006; Somyürek ve diğerleri, 2009; Sumi, 2011; Top, 2007; Weikart & Marrapodi, 1999; Yunus, 2007), teknoloji

kullanımını destekleyen okul ortamının olmayışı (e.g., Egbert ve diğerleri, 2002; Hong 2009, 2010; Lam, 2000; Karaca, 2011; Kılıçkaya, 2012; Somyürek ve diğerleri, 2009; Top, 2007) ve okul çapında teknoloji kullanımı konusunda planlama eksikliği (e.g., Gülbahar, 2007; Somyürek ve diğerleri, 2009; Weikart & Marrapodi, 1999) ile ilgilidir.

Sonuçlar göstermektedir ki sınırlı da olsa öğretmenler sınıflarında teknolojiyi pratik oluşu ve zaman kazandırması sebebiyle tercih etmektedirler. Teknoloji kullanımı aynı zamanda öğretmenlerin otantik ders kaynakları bulmalarını ve öğrencilerinin İngilizce öğrenmeye güdülenmesini sağlamaktadır.

Bu bulgular, İngilizce öğretmenlerinin teknoloji kullanımını inceleyen Karakaya (2010)'nın bulgularıyla örtüşmektedir. Karakaya da sadece çok az sayıda öğretmenin sınıflarında wiki, blog gibi araçları kullandığını, çoğunun ise sadece ders kaynağı bulma, sunum hazırlama ve ödev vermek için bilgisayar kullandığını göstermiştir. Benzer şekilde Akcaoğlu (2008) da İngilizce öğretmenlerinin sınıflarında çok nadir teknoloji kullandığını, kullandıkları araçların da genelde öğretmen merkezli olduğunu bulmuştur. Teknolojinin pratikliği ve zaman kazandırma özelliği önceki çalışmalarda da öğretmenler tarafından vurgulanmıştır. (örneğin; Lam, 2000; Zhao & Frank, 2003)

4.2. Öğretmenlerin Bilgisayar Destekli Dil Eğitimi Üzerine Aldıkları Çevrimiçi Eğitim Hakkındaki Görüşleri

Bulgulardan bir tanesi, öğretmenlerin bilgisayar destekli dil eğitimi üzerine aldıkları çevrimiçi eğitimde bilgisayar becerilerinin yetersizliği sebebiyle birçok zorlukla karşılaştığıdır. Katılımcı öğretmenlerin bilgisayar kullanma yeterlilikleri değişiklik göstermektedir ve bilgisayarı yeterince iyi kullanamayan öğretmenler, eğitimin onların seviyesinin çok üstünde olduğunu belirtmiştir. Daha önce bilgisayar destekli dil eğitimi üzerine verilen öğretmen eğitimi çalışmalarında öğretmenlerin değişen derecelerde bilgisayar becerilerine sahip olduğu ortaya çıkmıştır (Bauer- Ramazani, 2006; Peters, 2006; Olesova & Meloni, 2006). Peters (2006) lisans düzeyinde

bilgisayar destekli dil eğitimi üzerine verilen bir derste hem teknik hem de pedagojik bilgilerin verilmesinin etkili olmadığını, çünkü vaktin çoğunun teknik bilgilerle geçtiğini ve pedagojiye pek zaman kalmadığını bulmuştur. Bu çalışmadan da yola çıkılacağı üzere bilgisayar destekli dil eğitimi üzerine olan bir derste veya eğitimde öğrencilerin ilk önce yeterli teknik altyapıya sahip olması gerekmektedir ve bu altyapı üzerine pedagojik bir temel oluşturulmalıdır. Şüphesiz ki teknik altyapı çevrimiçi eğitimde diğer eğitimlerde olduğundan daha hayati bir önem taşımaktadır.

Bilgisayar becerilerinin yetersizliği sebebiyle bazı öğretmenler bilgisayar destekli dil eğitimi üzerine çevrimiçi yerine yüz-yüze bir eğitim almayı tercih etmişlerdir. Öğretmenler böyle bir eğitimde birçok bilgisayar uygulamasını ve bilgisayarı yetkin bir şekilde kullanmayı öğrenmek istemişlerdir. Eğitimde zorlukla karşılaşmayan öğretmenler ise, günlük yaşamlarında veya derslerinde bilgisayar, internet, eşzamanlı ve eşzamanlı olmayan iletişim araçlarını kullanma deneyimlerinden faydalandıklarını ifade etmişlerdir. Çevrimiçi ortamlarda temel veya orta düzeyde bilgi ve iletişim teknolojilerini kullanma becerisinin önemi alan yazında da pekçok çalışmada ifade edilmiştir (Bekele, 2008; Erlich ve diğerleri, 2005; Hukle, 2009; Menchaca & Bekele, 2008).

Araştırmanın bir diğer önemli bulgusu öğretmenlerin bilgisayar destekli dil eğitimi üzerine alacakları eğitimin yaşam temelli öğrenme yoluyla öğretmenlerin sınıf ortamlarında uygulamalar içermesi isteği olmuştur. Öğretmenler, bu tarz bir eğitimin öğrenilen teknolojik araçların gerçek sınıf ortamında uygulamasını görmelerini, çıkan sorunları asıl ortamında teşhis etme ve eğitmenlerin yardımıyla sorunlara çözümler getirmelerini sağlayacağına dikkat çekmiştir. Yaşam temelli öğrenmeyi benimseyen yabancı dil öğretmen eğitimleri alan yazında birkaç araştırmacı tarafından da önerilmiş ve uygulanmıştır (e.g., Chao, 2006; Cutrim Schmid, & Hegelheimer, 2014; Egbert, 2006; Egbert & Brander, 2010; McNeil, 2013; Rickard ve diğerleri, 2006).

Öğretmenlerin önerileri ve çevrimiçi öğretmen eğitiminin faydaları birlikte göz önüne alındığında, çeşitli aşamalardan oluşan çevrimiçi öğretmen eğitimine giden bir

uygulama öne sürülebilir. Buna göre İngilizce öğretmenlerinin çevrimiçi bir eğitim almak yeterliliğini kazanana kadar, çeşitli aşamalardan geçmeleri gerekmektedir.

İlk aşama, çeşitli bilgisayar uygulamalarının öğretildiği, öğretmenlerin bilgisayarı, eşzamanlı ve eşzamanlı olmayan iletişim araçlarını kullanmalarını sağlayan temel bilgisayar becerilerini kazanmalarını sağlayan yüz yüze bir eğitimden oluşmaktadır. Bu eğitimi aldıktan sonra, öğretmenler, yüz yüze veya daha ideal olarak harmanlanmış şekilde, öğretmenlerin sınıf ortamı içinde bilgisayar destekli dil eğitimi üzerine bu alandaki uzmanların da desteği ve danışmanlığıyla eğitim almaya hazır olabilirler. Bu uygulamanın başarıya ulaşması için, her aşamadaki başarı düzeylerini gösteren bilgi beceriler belirlenmeli ve belirli bir aşamanın bilgi ve becerilerini taşıyan öğretmenler direk olarak bir sonraki aşamaya geçebilmelidir. İkinci aşama, öğretmenler üçüncü aşamaya geçmek için kendilerini yeterli hissedene kadar birkaç kez tekrarlanmalıdır. Öğretmenler sınıfları içinde uygulama yapma ihtiyacında olacağı için en azından iki kez böyle bir eğitim almalıdırlar.

Öğretmenlerin sınıflarında teknoloji kullanımı üzerine yeterince uygulama yaptıklarını ve çevrimiçi eğitim için gerekli becerileri kazandıklarını göz önüne alınca, üçüncü aşamaya geldiklerinde çevrimiçi eğitim için hazır oldukları düşünülebilir. Bax (2003)'ın oluşturduğu, teknolojinin artık o kadar sıradan hatta görülmez hale geldiği bir aşamayı anlatan ve teknoloji entegrasyonunun son aşaması olarak nitelendirilen normalleşme terimine benzer olarak, çevrimiçi yabanci dil öğretmen eğitimi de bilgisayar destekli dil eğitimi konusunda verilen öğretmen eğitimlerinin son noktası olmalıdır. Bu tarz eğitimler sayı olarak çok ve sürekli olarak İngilizce öğretmenlerine sunulmalıdır.

Çevrimiçi bu eğitimler de çeşitli aşamalarla devam etmelidir. İlk eğitimler, yine yaşam temelli öğrenme üzerine kurulmalı ve öğretmenlerin sınıf ortamında uygulamalar yapmalarını gerektirmelidir. Mümkünse eğitimi alan öğretmenler, çalıştıkları okulların şartlarının benzerliğine göre benzer koşullara, örneğin benzer teknolojik altyapıya sahip öğretmenlerle gruplandırılmalıdır. Öğretmenler sınıf uygulamaları içeren çevrimiçi eğitim ile yeterince deneyim kazandıktan sonra

bundan sonraki çevrimiçi eğitimlerin sınıf uygulamaları içermesine gerek yoktur. Yaşam temelli öğrenme üzerine kurulu birkaç çevrimiçi eğitim alan öğretmenler, bundan sonra alacakları çevrimiçi eğitimler için hazır olacaklardır. Bu uygulamanın öğretmenlerin bilgisayar destekli dil öğretimi üzerine aldıkları eğitimde edinilen bilgi ve becerilerin gerçek sınıf ortamına aktarılmasında da önemli katkı sağlayacağı düşünülmektedir.

5. SONUÇLAR

İngilizce öğretmenlerinin sınıflarında teknoloji kullanımı günümüzde zaruri hale gelmiştir. Fakat hem ulusal hem uluslararası araştırmalar göstermektedir ki öğretmenlere teknoloji kullanmalarına elverişli bir ortam sunulmamaktadır. Çeşitli etmenler öğretmenlerin teknoloji kullanımına engel olmaktadır. Bunlardan birisi de hizmet içi eğitimlerin nitelik ve nicelik olarak öğretmenlerin ihtiyaçlarını karşılayamamasıdır. Öğretmenlere sınıflarında teknoloji kullanmalarını sağlayacak, etkili, bilgisayar destekli dil öğretimi ile ilgili eğitimlerin sürekli olarak sunulması gerekmektedir.

Bahsedilen sorunlara çözüm olarak, bu çalışma bir çevrimiçi öğretmen eğitim uygulaması modeli geliştirmiştir. Bu uygulama modeli çeşitli aşamalardan oluşmaktadır ve çok sayıda eğitimden oluşmaktadır. Buna göre ilk aşamada temel bilgisayar becerileri yüz yüze bir eğitimde öğretilmelidir. Bu eğitimi aldıktan sonra, öğretmenler, yüz yüze veya daha ideal olarak harmanlanmış şekilde, öğretmenlerin sınıf ortamı içinde bilgisayar destekli dil eğitimi üzerine bu alandaki uzmanların da desteği ve danışmanlığıyla eğitim almaya hazır olabilirler. Bu aşama, öğretmenler üçüncü aşamaya geçmek için kendilerini yeterli hissedene kadar birkaç kez tekrarlanmalıdır. Üçüncü aşamaya geldiklerinde öğretmenler çevrimiçi eğitim için hazır hale gelirler. Çevrimiçi eğitimler de birkaç adımla ilerlemelidir. İlk eğitimler yine yaşam temelli öğrenme üzerine kurulu olmalıdır. Öğretmenler sınıf uygulamaları içeren çevrimiçi eğitim ile yeterince deneyim kazandıktan sonra bundan sonraki çevrimiçi eğitimlerin sınıf uygulamaları içermesine gerek yoktur. Bu

uygulama modelinin, eğitimde edinilen bilgi becerilerin sınıf ortamına aktarılmasında da fayda sağlayacağı düşünülmektedir.

APPENDIX I: Tez Fotokopisi İzin Formu

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü	
Sosyal Bilimler Enstitüsü	X
Uygulamalı Matematik Enstitüsü	
Enformatik Enstitüsü	
Deniz Bilimleri Enstitüsü	

YAZARIN

Soyadı: Songül
Adı: Behice Ceyda
Bölümü: İngiliz Dili Öğretimi

TEZİN ADI (İngilizce) : Language Teachers' Perceptions about an Online Basic CALL Training

TEZİN TÜRÜ: Yüksek Lisans [X] Doktora [ ]

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. [ ]
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir Bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. [ ]
3. Tezimden bir bir (1) yıl süreyle fotokopi alınamaz. [X]