ULUDAĞ UNIVERSITY

INSTITUTE OF EDUCATIONAL SCIENCES

ENGLISH LANGUAGE TEACHING DEPARTMENT

AN INVESTIGATION OF ENGLISH LECTURERS' ATTITUDES TOWARD INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) AND THEIR USE OF TECHNOLOGY

MASTER OF ARTS

Özge ÖZTÜRK

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Supervisor: Assoc. Prof. Dr. Esim GÜRSOY

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BİLİMSEL ETİĞE UYGUNLUK

Bu çalışmadaki tüm bilgilerin akademik ve etik kurallara uygun bir şekilde elde edildiğini beyan ederim.

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Doç. Dr. Esim GÜRSOY

Uludağ Üniversitesi

Üye

Doç. Dr. Ayşegül A. YEŞİLBURSA

Uludağ Üniversitesi

Üye

Yard. Doç. Dr. Selmin SÖYLEMEZ

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To my beloved family

&

To my precious brother Özgün ÖZTÜRK

Abstract

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AN INVESTIGATION OF ENGLISH LECTURERS' ATTITUDES TOWARD INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) AND THEIR USE OF TECHNOLOGY

In the present study, how EFL instructors understand the use of computer technologies and their attitudes towards ICT were investigated. The aims of this research were to define the instructors' attitudes, explain the relationship between instructors' attitudes and their ICT use and specify their ICT needs. With these aims, 63 EFL Instructors, who work at Uludağ University School of Foreign Languages, were given two types of data collection instruments. The first questionnaire aimed at measuring the ICT use with the participants' demographic features and the second one aimed to identify instructors' attitudes towards ICT. Additionally, twelve instructors were interviewed to get a deeper understanding of their attitudes and ICT use. The data collected from the questionnaires were analyzed quantitatively using SPSS, and the interviews were analyzed qualitatively. The findings of the study revealed that nearly all participants regarded ICT as an invaluable tool for their teaching and had moderately positive attitudes towards using it for personal or professional reasons. There were some significant factors such as age, teaching experience and computer skills which are the most determinant factors affecting ICT use of instructors. The frequency of their ICT use for personal use is higher than their professional use and at that point their primary ICT need is training. The results of this study have pedagogical implications for the Council of Higher Education for teacher education, English teachers and language schools.

Keywords: Attitudes of teachers towards technology, educational technology, ICT needs, ICT use.

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İNGİLİZCE OKUTMANLARININ BİLGİ VE İLETİŞİM TEKNOLOJİLERİNE (BİT) KARŞI TUTUMLARININ VE TEKNOLOJİYİ KULLANIMLARININ İNCELENMESİ

Bu çalışmada, İngilizce okutmanlarının bilgisayar teknolojilerini kullanımları ve bilgisayar ve iletişim teknolojilerine karşı tutumları araştırılmıştır. Çalışmanın amacı, okutmanların bilgisayar ve iletişim teknolojilerine karşı tutumlarının belirlenmesi, teknoloji kullanımları ile tutumlarının arasındaki ilişkinin açıklanması ve BİT ihtiyaçlarının belirlenmesidir. Bu amaçlar doğrultusunda, Uludağ Üniversitesi Yabancı Diller Yüksek Okulu'nda görev yapan 63 İngilizce okutmanına veri toplama aracı olarak iki anket uygulanmıştır. Veri toplamada, demografik özelliklerle beraber BİT kullanım ölçeği ve BİT'e karşı tutum ölçeği olmak üzere iki anket kullanılmıştır. İlave olarak, 12 okutman ile teknoloji kullanım ihtiyaçlarının belirlenmesi ve teknolojiye karşı tutumlarını daha iyi anlamak için mülakatlar yapılmıştır. Anketlerden toplanan veriler SPSS programı ile sayısal olarak, mülakat içerikleri ise içerik analizi ile birlikte betimsel olarak analiz edilmiştir. Araştırma bulguları, İngilizce okutmanlarının büyük çoğunluğunun BİT 'i öğretim sürecinde çok değerli bulduklarını ve kişisel ya da mesleki amaçlı kullanımları için BİT'e karşı oldukça olumlu bir tutuma sahip olduklarını göstermektedir. Okutmanların BİT kullanımını etkileyen bilgisayar becerileri, mesleki deneyim ve yaş gibi bazı belirgin faktörler vardır. Kişisel amaçlı BİT kullanım sıklığı mesleki amaçlı kullanıma göre daha yüksektir ve bu noktada en temel ihtiyaçları teknoloji eğitimidir. Bu çalışmanın bulguları İngilizce öğretmenleri, dil okulları ve Yüksek Öğretim Kurulu (YÖK) öğretmen yetiştirme programları açısından pedagojik önem arz etmektedir.

Anahtar sözcükler: Öğretmenlerin teknolojiye karşı tutumları, Eğitim teknolojisi, BİT ihtiyaçları, BİT kullanımı

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Chapter 1

Introduction

The digital era, supported by the latest developments, has contributed a lot in terms of information and communication technologies (ICT henceforth), into the field of education. Access to computers and smart devices have been growing rapidly, which makes the computers' role crucial in today's world. However, an adoption of ICT into education relates to many factors including personal and professional development. On the other hand, a vast knowledge of professional development requires the mastery of various skills, the most demanding one being ICT, which includes many technological applications, tablets, mobile devices and electronic teaching materials.

Knowing the fact that ICT is still a controversial field for many teachers at the point of integration into teaching, attitudes towards the use of it and whether it is an advantage or a threat, how and why its use is crucial in terms of teaching, language learning and professional development are very varied (Reynolds, Treharne & Tripp, 2003). Due to this controversy, some English teachers dedicate themselves to educational technology while some of them might have strong resistance to its usage. The difference in teachers' perceptions and use of ICT remains a cause for concern which will lead us to seek more for the benefits that ICT can play in the development of learning process.

As well as teachers' attitudes towards ICT, their ICT skills should also be taken into consideration. Many educational institutions are equipped with the latest computers and internet access, plus projectors and online teaching materials. However, teachers should feel competent enough to teach with ICT. At that point, effective implementation of ICT relates to teachers's ICT skills and their attitudes toward using it.

There are abundant studies on teachers' attitudes towards ICT (Albirini, 2006; Aydın, 2013; Dogoriti, 2010; Teo, Lee & Chai, 2008; Tondeur, Van Braak & Valcke, 2007). Given

the crucial role of teachers' attitudes towards ICT in these studies above, we can talk about a transformative stage at institutions which includes expanding the curriculum and material development through ICT. Referring to the need especially in English language teaching and ICT relationship in the literature, this study focuses on determining EFL instructors' use of ICT for personal and professional development and additionally exploring the relationship between teachers' attitudes and their use of ICT. The current study aims at filling the gap in the literature by revealing the use of ICT in terms of language teaching and then exploring the EFL instructors' ICT needs.

1.1 Background of the Study

Recently, new approaches in computer technology have challenged not only the traditional teaching approaches but also the need for the implementation of technology in language education. Along with the impact of the educational technologies worldwide, the extensive use of computers has had a critical role in the classroom in language teaching. Except for its usage within the classroom, ICT has the value of increasing use by teachers for their own personal and professional reasons. As noted by Morris (2010), regarding Continuing Professional Development (CPD) in teaching, using ICT has been the most popularly selected need and also frequently chosen topic among all but recently qualified teachers. Therefore, ICT seems to be an extricable part of professional development.

In terms of teaching English, contemporary approaches have been changing rapidly thanks to the new innovations happening in the field of technology. Compared to the past, it can be observed that accessibility of the new technology tools has also increased. Hence, technology can be brought to the classroom by language teachers in the process of language learning. As teachers, it is vital that we update our teaching skills with technology to increase the learning opportunities for our learners. In these circumstances, technology-assisted language teaching materials are on their way to restructuring the physical environment of the

language classroom and teachers' roles in language teaching. The extensive integration is the main issue to take into consideration in terms of successful use of computer technologies. Lam (2000) emphasizes that technology use strongly shaped by teachers' beliefs in order to meet the ICT demands of teaching profession which refers to the computerization of education, teachers are supposed to have the proper technological competence and possess positive attitudes toward ICT (Zhou, Zhao, Hu, Liu & Xing, 2010).

In the past, the education policy of governments and the cost of computer technology for schools greatly restricted the use of computers in education. Nowadays, the situation has changed a great deal and as a result of this, technology has become the central component of learning in institutions. Computer use in language teaching started in the 1960s. Thanks to the explosion of multimedia developments and the Internet, interest in using computers has increased since the 1990s by a great deal of educators all around the world (Warschauer, 1998).

In order to maximize this advent, we need to take the perceptions of the teachers toward technology into consideration and delve more into their use of it. As a result, the questions to put forward are the ones related to what variables determine the implementation of ICT.

1.2 Purpose and the Significance of the Study

Because of the ever changing nature of ICTs, the present study is intended to reflect upon the ICT needs and use of EFL instructors with a focus on their attitudes toward ICT by considering some variables such as age, gender, time, working experience, and computer skills. The gap between the literature on ICT and issues concerning EFL instructors makes this empirical study valuable.

In education, wide usage of technology has rapidly increased. As a result of this, it is really essential to identify teachers' personal and professional needs in terms of ICT usage.

According to specified needs met by institutions later on and with the high-level of teacher involvement, technology integration into teaching will have its potential level. Successfully identified needs are important not only for technology-rich educational context but also for teachers' professional development. Furthermore, technology-rich context can help teachers to build more self-confidence in their profession. The findings of this study can strengthen an argument for the need of more up-to-date information in terms of high-tech teaching environments. Additionally, the findings can also give ideas about the teachers' personal and professional development needs.

Another aim of this study is to provide administrators and teachers with the information about teachers' ICT needs and purpose of its usage by English language teachers. Information gathered on the purpose and needs may be invaluable for restructuring the curricula of preparatory classes of universities in Turkey. Last but not least, the findings of this study will contribute to the future planning of school curricula at Uludag University School of Foreign Languages (UUS of FL henceforth) as the administration aims to make use of new technologies.

The study aims to address the following research questions:

1.What are EFL instructors' at UUS of FL attitudes toward the use of ICT?

2. How do the variables such as age, gender, teaching experience, computer skills affect EFL instructors' attitudes toward ICT?

3. Is there a relation between computer skills and attitude of EFL instructors?

4. What technological tools do instructors of English use for personal development?

5. What are the expectations of EFL instructors at UUS of FL from the administration regarding ICT support?

6. What are the participants' ICT needs?

7. What purposes do EFL instructors use ICT for?

1.3 Conclusion

The background of the study, statement of the problem, purpose and significance of the study were mentioned in this chapter. There will be a review of the relevant literature in the next chapter.

Chapter 2

Review of Literature

In this chapter, the literature on the personal and professional development of teachers, technology integration and their attitudes toward the use of ICT are reviewed. The first section reviews the literature on language teaching and technology, with a brief history of Computer-Assisted Language Learning along with its advantages and disadvantages. This is followed by the second section on professional development via ICT and attitudes toward it. In terms of teacher attitudes towards technology acceptance and factors that affect technology implementation, the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and Technology Acceptance Model (TAM) (Davis, 1989; Davis, Bagozzi & Warshaw, 1989) will be carefully examined. Later on, there will be examples of ICT studies from Turkey and all around the world.

2.1 Language Teaching and Technology

For the last twenty years, technology has played the key role in the area of education including foreign language teaching. With recent developments in the computer world, our perception of the role of the technologies in education has also evolved. Warschauer and Meskill (2000) define technology as the process of supporting every type of language teaching in a variety of contexts. Speaking broadly, this can be observed in the examples such as in grammar-translation method that requires instruction of grammar rules, the blackboard can be the best vehicle to be used. Later in most schools, overhead projectors were being used along with the blackboard. After all, with the rise of the popularity of the audiolingual method, which aimed to focus on language learning through oral repetition, the preferred medium to be used was audio-tape. It can be seen that language teaching methods witnessed a change toward communicative based language teaching in the 1980s and both the purpose and

content of the interaction gained importance. As Warschauer (2000) stated below, the purpose and the content of interaction are crucial components in language learning:

> …learning a second or foreign language involves apprenticing into new discourse communities. The purpose of interaction is seen as helping students enter these new communities and familiarize themselves with new genres and discourses, so the content of the interaction and the nature of the community are extremely important (Warschauer, 2000, p.10).

It can be suggested that interaction has a comprehensive function, which helps students to improve their communication skills. Since the new online learning communities serve and support the development of communicative language teaching, the integration of technology into education has been a crucial issue for the last twenty years and is increasing steadily (Kurt, Günüç & Ersoy, 2013).

In today's world, textbooks are accompanied by electronic resources such as online dictionaries and online learning environments. These are inextricable parts of language teaching and new learning contexts. Apart from these virtual learning environments, communication outside the classroom mostly takes place via e-mail exchange and other online video platforms. As a result of this, today's teachers who fail to use technology in language teaching are likely to be considered out-of-date (İnan & Lowther, 2010; Lim and Chan, 2007; Tondeur, Kershaw, Vanderlinde & van Braak, 2013).

It is not only the teachers but also the students who need to be digitally literate citizens in today's world. The partnership for the 21st century skills framework (2006) defines ICT literacy as one of the key abilities that our students need for the future. According to its definition, ICT literacy involves the ability to use technology with its all potentials for mastering critical thinking and problem solving skills.

The Partnership for 21st Century Skills is an organization founded in 2002 in the USA because of the fact that new graduates were lack of the skills to be more productive in the society and in their work life. The starting point is that the society has all its technology opportunities outside, however educational institutions have not embraced the technology in their full potentials yet. As a result of this, there is a crucial need for switching in educational organizations in terms of their curriculum.

Moving on to new learning skills which newly graduated students should possess in addition to traditional ones, "The Partnership for the 21st Century Skills" asserted 4 Cs—"super skills" for the 21st century: Creativity, Communication, Critical Thinking and Collaboration. The school subjects such as foreign languages can serve as an umbrella while the main content of these school subjects should be designed according to 4C model in order to have successful individuals in real life such as good creators, communicators, critical thinkers and collaborators. This assertion was supported by Saxena (2015, p. 1): "These…4Cs that are the super skills for the 21st century… help develop the qualities that students need to possess in the 21st century for success in college, careers and citizenship".

These skills have also had transformation stage with the advent of new technologies and ICT. As a result, meaningful relationships and effective participation in the workplace gained importance. At that point, communication skills can be regarded as one of the highly required skills in the real world with its online opportunities. Along with the ICT literacy definition, the communication skills are essential and explained in details. Accordingly, educated person should:

> Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills, listen effectively to decipher meaning, including knowledge, values, attitudes and intentions, use communication to inform, instruct, motivate and

> persuade, utilize multiple media and technologies, communicate effectively in diverse environments. (Trilling & Fadel, 2009, p. 55)

Without the support of well-trained teachers on ICT, students are not expected to master their digital communication skills to be effective and active learners. Furthermore, the role of teachers is also expected as a guide with educational methods by using collaboration and communication tools. Solomon and Schrum (2007) emphasize using flexible approaches as a key point to prepare students and meet the need for 21st century skills instead of using traditional teaching and testing methods.

2.2 Computer-Assisted Language Learning (CALL)

In terms of ELT, the term CALL is used to emphasize technology in language teaching related to its use and the term will be defined by a brief history along with the advantages and the disadvantages of the CALL.

CALL is an umbrella term under which we can observe in many stages. It was defined by Levy (1997, p. 1) as "the search for and study of applications of the computer in language teaching and learning". With the developments in technology and multimedia applications, the role of computers in language teaching has gained importance in terms of current teaching practices. In order to understand the implications of computers for language teaching well, it is crucial to evaluate the inherent features of CALL itself. According to Kern and Warschauer (2000), the development of CALL is shown under the three stages as behavioristic or structural CALL, communicative CALL and integrative CALL. Table 1 shows these three stages.

Table 1

Three stages of CALL and basic features of these stages

Stage	Technology	Pedagogical Approach	View of Language	Use of Computers	Teacher's role
1960s-1980s: **Behavioristic or Structural CALL**	Mainframe	Grammar-Translation and Audio-Lingual	Structural (formal-structural system)	Habit formation: Repetitive drills Drill-and-practice Translations tests	Sole source of Lang. information To give instructions
1980s-1990s: **Communicative CALL**	PCs	Communicative Lang. Teaching	Cognitive (mentally-constructed system)	Communicative exercises: Using forms Implicit grammar teaching forms Text reconstruction Simulations	Activator facilitator
1990s to 21st c. **Integrative CALL**	Multimedia Internet - based appl.	Content-Based, Task-based, project-based, ESP, EAP	Social, Socio-cognitive (developed in social interaction)	Authentic social, context, discourses Integrate various skills (R, W, S, L) of language learning and use	Counsellor mentor

(The table is based on Kern and Warschauer, 2000, p. 1-19)

The CALL concept stated above has changed since then and has created new contexts that shape how learning takes place. Thanks to improved technology, the use of teaching devices has changed from cable-based to wireless ones with a direct online connection. As a result, the nature of knowledge turns into a 'multimedia-ish' with task-based and content-based approaches. A movement from text based information to audio visual forms of

information and communication has developed the ways of online and multimedia presentation tools in language teaching. In this era, we can also observe the movement of CALL from computer laboratories to classroom use. Access to computers and online devices have increased in the last twenty years (Fotos & Browne, 2013).

In the beginning, CALL had three stages. As being the first phase, according to Warschauer (2000), Behavioristic CALL was based on the behaviorist theory with its educational implementations in the 1960s and 1970s including repetitive language drills. This drill and practice courseware assigns the computer as a tutor which is responsible for delivering instructional materials to the student (Taylor, 1980). In this paradigm, one of the most plausible CALL tutoring systems was PLATO (Programmed Logic for Automatic Teaching) which includes drills, explanations for grammatical rules, and tests related to translation (Ahmad, Corbett, Rogers & Sussex, 1985). Then, the rise of computers for personal use started giving greater opportunities for personal users with more communicative softwares. The communicative CALL, implemented in 1980s-1990s, was affected by these changes as shown in the table above.

Communicative CALL emphasizes focusing more on using forms, teaching grammar implicitly, encouraging students to create original utterances instead of prefabricated language and giving greater possibilities to use the target language (Underwood, 1984). However, a study by Bax (2003) indicates that though we can see some specific parts of CLT, this stage was lack of the main feature of human communication and interaction:

> …so if the two key aspects of CLT, namely the notion that learners learn in order to communicate and that they may learn to do this best through the process of communication itself, are apparently absent from so-called Communicative CALL, this must raise the suspicion that the term ‘communicative’ may not be appropriate for the software or the uses of CALL during the 1980s at all (Bax, 2003, p.18).

As communicative CALL phase was lack of desirable communicative competence in an authentic environment, the emergence of task-based and content-based approaches and learners in authentic environment paved the way for the last phase. The last phase, the Integrative CALL, seeks to integrate technology into language learning process. According to Warschauer (1996), multimedia computers and the Internet are the basis of integrative approaches to CALL. Furthermore, Warschauer and Healey (1998) pointed out "if the main frame was the technology of the Behavioristic CALL, and the PC for the technology of Communicative CALL, the multimedia networked computer is the technology of Integrative CALL" (p.2) . Due to the fact that the multimedia networked computers are within an easy reach compared to other phases of CALL, they serve for more possibilities in terms of integrated uses of technology in language learning. Thanks to these developments, teachers' roles have changed in the age of information. Similarly, communication via the internet shows us the many ways of new online learning environments.

2.2.1 Advantages of CALL

With the advents in information and communication technology, the advantages of technology integration into language teaching are increasing among teachers, trainers, administrators and particularly students. Prensky (2001) defined today's learners as "native speakers of the digital language of computers, video games, and Internet" (p. 1). Their thinking and learning processes have changed entirely, and as a result of this, we can name the advantages of CALL suitable for the 21st century education and its learners.

To start with, autonomy can be accepted as one of the desirable advantages for language learners. Holec (1981, p. 3) explained it as the "ability to take charge of one's own learning". Learners are responsible for their own learning in terms of selection of materials, an organization of the whole process and also evaluation of their progress. In language learning with CALL, these include choosing a learning software, methods or techniques and

self-assessment. Having investigated learning outcomes, Chapelle (2009) found that CALL helps learners to achieve not only certain competence in using the technology but also learner autonomy as well as greater intercultural competence via communication in the target language. As CALL provides greater flexibility for learning pace with a large amount of efficient sources, it just fits the notion of autonomy.

Studies in foreign language learning and teaching also highlighted that computers have been used in an effective way through the years. In the spirit of globalization, the incorporation of the Internet into education has evolved a lot in recent years. As Richards (2005) states, the Internet, a worldwide library, can help learners benefit from a great deal of authentic materials according to their own needs, learning style and learning objectives. Learning can go beyond classroom environment and thus create opportunities for life-long learning. With the help of CALL, courses can become more accessible to learners, and they can decide on their learning pace and time. In this way, the learning process will be more beneficial for students.

Moreover, non-native speakers of English are supported by computer technologies with a wide range of learning environments. Thus it is easier for learners to improve their English skills through online learning for realistic purposes. As a result of this, language educators' role has switched to a new one which is related to creating learning environments for authentic and meaningful interaction. According to Chapelle (2001, p.55), authenticity is "the degree of correspondence between the learning activity and target language activities of interest to learners out of the classroom". This can be accomplished with the help of computers as educational technologies offer access to online environments of international communication (Warschauer & Meskill, 2000). Similarly, as Chun and Plass (2000) emphasized, it is really important for schools to create an immediate access to authentic

materials and enhance communication, so all schools need to own reliable multimedia labs accordingly.

Barron, Orwig, Ivers and Lilavois (2001) pointed out the advantages of technology as it caters the requirements of various learning styles, promotes individual motivation and it also motivates the digital native students who have grown up using the technology like internet, computers and mobile devices. Additionally, it encourages collaboration and critical thinking which are the two elements of the 4C model defined by *The Partnership for 21st Century Skills*. Communication skills that online education supports in an educational context are stressed by Piezon and Donaldson (2005). In a study by Mullamaa (2010), it was also discussed that successful ICT integration could give more time and place beyond the classroom. As a result, students become more motivated with the opportunity of time and place which are independent aspects of ICT.

2.3 Information and Communication Technologies (ICT)

ICT integration has gradually gained importance as computers and the Internet have become more popular. The main reason is that all ICT related things such as Internet technologies and computer based learning environments support teaching and learning outcomes (Kuznekoff, Munz & Titsworth, 2015). ICT use in education includes any use of "computing devices such as desktop computers, laptops, software, or the Internet for instructional purposes" (Hew & Brush, 2007, p. 225). Furthermore, according to İnan and Lowther (2010), it specifically includes the use of technology by teachers for instructional preparation and delivery while using technology as a learning tool for students. As Anderson (2010) proposes, technology is everywhere with all kinds of signals including every single device that we use for communication, storage of information or for searching. Including all opportunities that ICT offers, there has been a great improvement in terms of ICT from the conceptual level to the implementation of school life. ICT integration into the curriculum can

be treated as “the use of new technologies to learn rather than learning to use new technologies” (UNESCO, 2008, p.4). In the light of this evidence, it is stated that digital inclusion is largely based on age and education level. Furthermore, it is also possible to assume that at a time when learners have conceptions about technology and its use for information and communication, the key issues about language teaching are yet to be about how to configure learning through technology.

Information and communication technology is the new term and mostly used as an extended form of information technology (IT), and it became popular with the use of the term in a report prepared by Dennis Stevenson for the UK officials in 1997. As computer technology devices such as scanners, printers and drivers were replaced by the new inventions in technology, the term IT became popular in various places in education. With the rapid integration of the Internet later on, new terms appeared such as networks, WWW (the World Wide Web), search engines, mobile phone applications, and synchronous communication programmes. The need for a broader term made ICT more interchangeably used in many areas from business to education. We can define ICT in this way as it:

> … generally relates to those technologies that are used for accessing, gathering, manipulating and presenting or communicating information. The technologies could include hardware (e.g., computers and other devices); software applications; and connectivity (e.g., access to the Internet, local networking infrastructure, video conferencing). What is most significant about ICT is the increasing convergence of computer-based, multimedia and communications technologies and the rapid rate of change that characterises both the technologies and their use.
>
> (Toomey, 2001, paragraph. 3)

In terms of education, the aim of the integration of ICT stated as being able to develop the quality standards and accessibility of the education meanwhile taking all

advantages of online learning opportunities together for the better of globalization in education according to Bruniges (2003). As a result of this, we need to take ICT into consideration along with the concepts which underpin the measurement of ICT integration. For example, one of the ICT tools, the Internet helps us to make our language classroom "ALIVE". It is suggested by Warschauer, Shetzer, and Meloni (2002) that the Internet brings *A*uthenticity with its opportunities to teach languages in authentic contexts. Also, it brings *L*iteracy which means the ability to read, write and communicate. Then *I*nteraction takes its place as means for language acquisition and fluency. Another one is *V*itality which means to arouse students' interest because of the real-life characteristics of Internet and lastly *E*mpowerment which means the development of the personal power of teachers and students in language classrooms.

2.4 Teacher Training in ICT

The roles of teachers have been redefined thanks to the changes of current technologies. It was discussed in many studies focusing on teachers and CALL regarding the importance of the training and the attitudes of teachers towards CALL (Egbert, Paulis & Nakamichi, 2002; Prestridge, 2012; Zhou, Zhao, Hu, Liu & Xing, 2010). In terms of teaching, many researchers recognize the teacher as an integral factor for the successful technology implementation into the classroom. As Baylor and Ritchie (2002) state, "regardless of the amount of technology and its sophistication, technology will not be used unless faculty members have the skills, knowledge and attitudes necessary to infuse it into curriculum" (p. 398). Additionally, it is emphasized by Jung (2006) that it is really important for teachers to create meaningful learning environments by using Web technology while motivating the students and their colleagues at the same time.

Language teaching approaches are renewing themselves as well as online learning environments in the 21st century. Language teachers' awareness about up-to-date technologies

and their use play the big role in language teaching as Mümtaz (2000) concluded that there is a need for creating teacher-awareness about the possible uses and benefits of educational technology. Inadequate technology skills arise as a result of lack of motivation among teachers. Therefore, limited integration takes its place when it comes to class preparation. Similarly, 'at need support' is emphasized by Gray, Pilkington, Hagger-Vaughan, and Tomkins (2007) referring to the attempts related to the inclusion of training opportunities, which meet special technology needs of teachers. It is not only knowing how to operate a computer but also designing learning materials are the things that matter most among teachers. As stated in Franklin (2005) "simply knowing how to use computers for one's personal use is not synonymous with knowing how to teach with technology" (p. 27). Another point that is as important as computer skills in technology integration is teachers' computer competence level. Teachers have more tendency to use traditional ways in their teaching because of the fact that they don't have enough computer competence level to feel secure with the new technology (Abu Seileek & Abu Sa'aleek, 2012). At that point, it is highly pointed out that teachers should feel secure about practices while using the technology in the classroom. Then, they will not see it as a threat to their professional autonomy, and therefore, they would become willing to use technology in their teaching process. In a study with 73 academics at nine higher education institutes in Netherlands, it was asserted that effective ICT training supports effective use of ICT among teachers and also arises self-confidence in their creativity to use ICT tools in their teaching (Rienties, Brouwer & Lygo-Baker, 2013).

In the book "Calling on CALL: From Theory and Research to New Directions in Foreign Language Teaching", Hubbard (2006) argues the fact that many language teachers are lack of experience with CALL software when it comes to learners' perspective. Then, it might be difficult to evaluate the CALL material in a proper way. At that point, choosing the suitable material for classroom environment in terms of proficiency level can be challenging

for language teachers. This can be counted as another need for professional development opportunities for teachers as well as the fact that they are in need of the support caused by technological use in education. CALL can be easily fitted into teachers'current implementation considering their beliefs about teaching. That is to say, teachers are intrinsically motivated and also see the pedagogic value of the practice. Similarly, there is a link between using CALL and professional development. Effective computer assisted language learning (CALL) cannot be meaningful without fully prepared teachers as pointing the mere role of professional development (Vallance & Towndrow, 2007; Wood, Mueller, Willoughby, Specht & Deyoung, 2005).

Regarding professional development issues, teacher professional development essentially must focus on many things including how technology is used in a more meaningful context and with more effective pedagogy. According to Chen (2003), language teachers are concerned about effective technology integration and searching for related tools and teaching materials. If schools design teacher training programmes to create confidence and positive attitudes in ICT integration, teachers will be more willing to catch up with advanced technologies. The effective teacher professional development also includes sustainability and collaboration to effect a change for the better of student learning (Li & Protacio, 2010; Shi & Bichelmeyer, 2007). This key aspect is also emphasized by Schibeci et al. (2008) that change calls for time and also strong support from school administrations for long periods of time so that teachers can master technological skills and would become capable of selecting appropriate software and integrating ICT into the curriculum. In the World Conference of Higher Education by UNESCO in 2009 (UNESCO, 2009) it is suggested that nations encourage more research on ICT in education and strengthen teacher knowledge regarding ICT.

However, teacher training part is always questionable. According to Maxwell (1997), in-service training is highly required and it must be a long-term introductory lesson. It seems certain that training should be highly applicable to classroom environment to make teachers see the real benefits of the technology. After the positive teaching and learning experiences, teachers are more likely to be confident and competent in the implementation of CALL in their own classrooms. This indicates that issues of using computers should be a part of teacher development programs (Jung, 2006; Lee & Son, 2006) in order to enable prospective teachers to be confident with their computer-based teaching skills when they start profession (Johnson, 2002; Oh & French, 2007).

At the implementation level, CALL can be enriched by teachers. Considering that teachers' views affect the implementation process, they must be qualified enough to utilize them in a successful way in the classroom. Liu, Theodore, and Lavelle (2004) emphasized that teachers' attitudes or concerns are the determinants of successful technology implementation. Thus in order to survive in an information era, teachers need to uptake ICT in their teaching. This need for ICT and teachers' attitudes towards ICT are widely investigated in various studies (Albirini, 2006; Aydın, 2013; Dogoriti, 2010; Teo, Lee & Chai, 2008; Tondeur, Van Braak & Valcke, 2007). It is not only teachers' attitudes that affect technology integration but also their beliefs. Moving from this point, identification of teachers' attitudes in many studies will help us to identify the factors of successful technology implementation among language teachers.

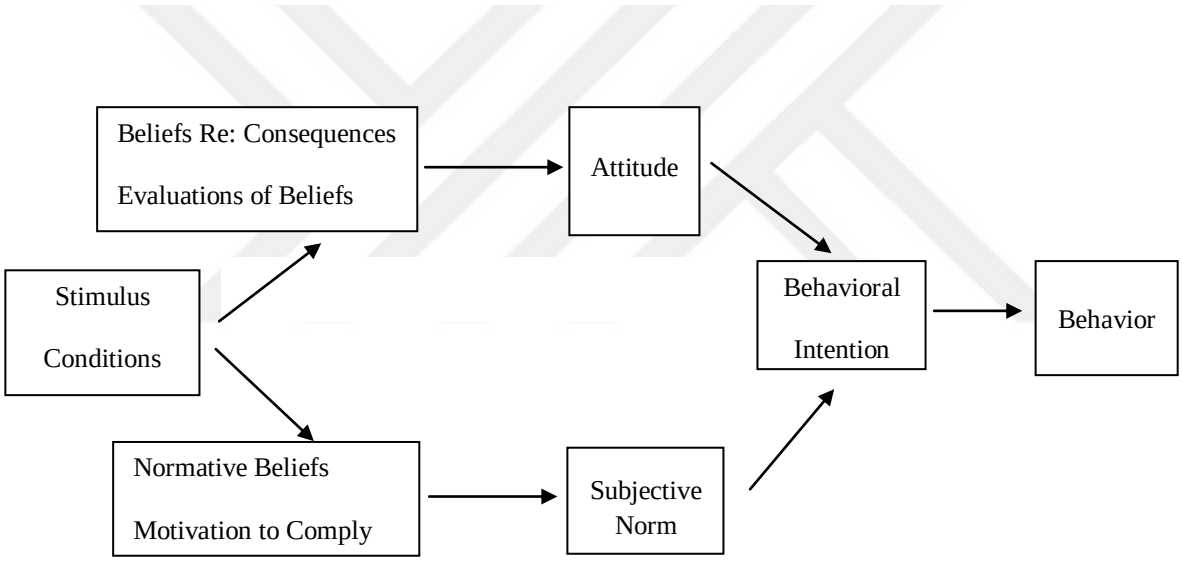
2.5 Teachers' Attitudes towards ICT

It has been realized by researchers that when accepting an innovation or not, the determinant factor is an attitude. As a result, in order to achieve the educational objectives, attitude plays a big role in educational settings. Attitude was defined as "a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols" (Hogg & Vaughan, 2005, p. 150). According to Ajzen

and Fishbein (1980), attitude consists of positive or negative feelings about the target behaviour. Moreover, Ajzen and Fishbein's (1975) Theory of Reasoned Action (TRA) is related to individual's degree of evaluative effect for the aimed behaviour. Consequences and evaluations play the big role in this theory. In other words, people evaluate the results of the behaviour according to their subjective norms and then the desirability level of the estimated consequences lead them to perform an act or not. Behavioural intention (BI) is the strongest measurement in this process of leading an action.

Figure 1

Theory of Reasoned Action



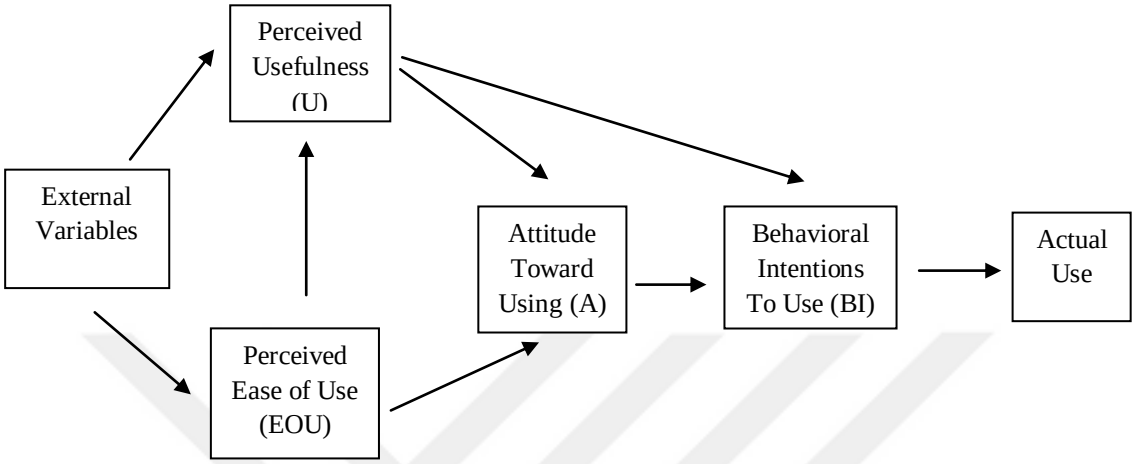
(Fishbein & Ajzen, 1975)

On the other hand, Technology Acceptance model (TAM) is an information systems theory, developed by Fred Davis (1989), and is an extension of TRA but less general than it. It explains user decisions of how and when to use a technology in various settings. Attitude measures are explained with the two technology acceptance variables: perceived usefulness (PU) and perceived ease of use (PE). PU is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, p.

320). PE refers to "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989, p. 320).

Figure 2

Technology Acceptance Model



(Davis et al., 1989)

In terms of TAM, in order to develop positive attitudes towards technology, it must be perceived useful and easy to use as shown in (Figure 2). For example, the teacher may think that ICT has great learning outcomes for his own language classroom, but at the same time he may think himself that he is incapable of using new technology. Therefore, his incapability of technology use is outweighed by the outcomes of language teaching with technology. At that point, the attitude is defined as the degree of evaluative effect for or against a specific behaviour. BI is the strongest predictor of real use.

Several researchers define attitude in different ways. Hogg and Vaughan (2005) summarised attitude in terms of organization of behavioural tendencies which are relatively related to significant things, groups or symbols. In most cases of the educational environment, educational objectives are achieved by the key role that attitude plays. Regarding the technological integration in the classroom, there are many different variables such as knowledge of computers (Mukti, 2000) and computer experience (Kumar & Kumar, 2003) that affect attitudes toward computers. Computer integration in the classroom is expected to

be high when teachers have positive attitudes (van Braak et al. 2004). In support for fostering computer use (Pelgrum, 2001; Zhao, Tan & Mishra, 2000) pointed out that teachers' attitudes and computer use are directly related and also teachers' computer skills, and knowledge are important determiners in technology use in education. For a successful implementation, in addition to teachers' attitudes, skills and knowledge, pre-service and in-service training as well as providing pedagogical support to teachers should be taken into consideration.

2.6 Factors Related to Teachers' Attitudes and ICT Acceptance

New and innovative approaches have changed the way we use technology in our daily lives and they have also challenged traditional language teaching approaches to technology integration in the classroom. Research reveals that successful and effective technology integration is also affected by pedagogical issues such as teachers' knowledge and skills, beliefs, attitude, personal and professional support. Similarly, there are also other factors that have been discussed in the literature under two subtitles as internal and external factors (e.g. Niederhauser & Perkmen 2008) while others chose to group them such as personal, environmental, social and curricular factors (e.g. ChanLin, Hong, Horng, Chang & Chu, 2006) whereas, some factors were groupped as 'educational and technological' by Braul (2006).

Starting with educational and technological factors, it can be easily observed that using technology in instruction gradually changes the way teachers teach at the school. However, not all schools are affected in the same pace. Interestingly, a study conducted by Bax (2003) reveals that people have a great tendency to think that CALL can replace all teaching tools teachers use in language teaching such as dictionaries, course books and even the teacher.

Attitudes and personal beliefs are the most influential internal factors that have already been discussed in other studies (Atkins & Vasu, 2000; Lam, 2000). These factors show that it is up to teachers to maximize the potential of the CALL but also the findings provided an

evidence that the success or failure of CALL is related to teacher training, computer facilities, prior teaching experiences, and teachers' attitudes toward computers.

Robertson et al. (1996) found that teachers' computer use is affected by several factors such as refusal to organisational change, refusal to outside intervention, and time management. Other factors include lack of support from the administration, teachers' perceptions and finally personal and psychological factors.

On the other hand, Lee and Son (2006) asserted that finding appropriate teaching materials and inconvenient use of computer labs can be considered as external factors. Moreover, high costs of educational technology integration can be another external determining factor. Because purchasing these softwares is an additional educational cost for organizations. Warschauer and Meskill (2000) stated that "there are definite startup expenses related to implementing new technologies in education" (p. 12). New classroom set-up in terms of both hardware and software as well as commercial materials for review and selection require extra funding from school administration.

At the technology implementation level, the key factor Mukama and Andersson (2007) found is teachers' success that was granted by easy access to computers by the school administration. Additionally, interactive online platforms and discussion boards can enable teachers to use technology effectively (Coniam, 2002; Ducate & Arnold, 2006). It can be deduced that well-equipped and well- supported teaching environments can reduce the barriers that are related to technology integration. Bacescu (2014) supported the idea that traditional methods of teaching should be combined with modern methods using ICT to facilitate technology integration. While doing this, ICT should not be an addiction. Teaching methods can include ICT tools along with the right teaching method for each student.

Teo (2009) claims that teaching methods can affect the use of ICT indirectly. Without having positive attitudes towards using ICT in the classroom, teachers have a tendency not to

use technology in their teaching. His findings also indicate that in the area of ICT literacy, more teacher professional development programs are needed.

2.7 Related Studies Conducted in Turkey and in the World

Many examples of using ICT in the classroom, attitudes, and factors related to ICT use can be found in the literature. Since the 2000s, there have been many specific studies regarding teachers' attitudes related to CALL in Turkey. One of the previous examples of these studies can be the one which is about teachers' attitudes related to computer use in classes. Tuzcuoğlu (2000) investigated the attitudes of EFL instructors working at Osmangazi University in Eskişehir. The results showed that the term CALL was not new for the EFL instructors and they would like to get more training to gain more knowledge about ICT. Besides, they had positive attitudes considering the use of computers in their classroom teaching.

In a study with high school EFL teachers in Eskişehir, Saklavcı (2010) found out that the Internet use was very high, and in addition to this, the teachers reported that they were using the computers more for personal purposes than instructional purposes. Though they had positive attitudes regarding the internet use, the study showed that they did not use it for their teaching.

Genç (2011) investigated 56 EFL teachers' attitudes towards implementing ICT in their teaching. The study pointed out the fact that EFL instructors' use of ICT and their level of knowledge were higher and they had positive attitudes towards technology implementation into their teaching.

Hişmanoğlu (2012) conducted a study with pre-service teachers. It was about their perception toward ICT in the distance higher education system in Turkey. The study revealed that the teachers who participated in the study had negative attitudes toward ICT on "the nature, level and delivery" of the training (p. 185). The participants regarded themselves as

the non-proficient user of ICT because of the lack of experience and knowledge. It was found in the study that there should be more training opportunities to improve pre-service teachers' computer skills and decrease their anxiety considering ICT skills.

At the international level, Chen (2008) conducted a study employing a concurrent mixed-method approach by studying the factors that influence teachers in terms of internet integration into their instruction, specifically these variables included teacher training, beliefs, attitudes, the constructivist thinking, institutional support, perceived capability, classroom pedagogy, and Internet use. 311 EFL teachers from Northern Taiwanese higher education institutions took part in the study. Both online survey and paper survey were employed to examine the factors influencing participants' use of Internet. It was found that teacher training is the crucial factor of all the seven variables. The study also indicated a positive correlation between teacher training and attitudes towards Internet use. It was suggested that behavioral changes occur subsequently after receiving training as well as creating positive attitudes toward the Internet use.

In another study, how EFL teachers in China used CALL and factors affecting the use of CALL were investigated (Li & Walsh, 2010). The study revealed that many teachers had an internet access with an ideal setting and had enough level of technical computer knowledge. Nevertheless, the computer use was only limited to PowerPoint presentations. According to findings, additional trainings were needed to be organized with the help of professional development activities to support teachers to become effective users of CALL and to integrate prospective ICT use in their teaching.

Gilakjani and Leong (2012) emphasized the importance of training for teachers, and their need for guidance in using technology. Moreover, they concluded that introduction of the technology resources is not enough for teachers' use of these sources in their teaching.

Sang, Valcke, van Braak, and Tondeur (2010) found out that apart from the gender effect, the effective ICT implementation notably related to all teacher-dependant variables. Correlated with other variables such as teacher efficacy, computer competence, and computer attitudes of the pre-service teachers, the fact that gender is the least effective factor, which has an impact on technology, was pointed out in various studies (Antonietti, 2006; Birgin, Çoker & Çatlıoğlu, 2010; Rahimi & Yadollahi, 2011; Tezci, 2010).

In another study, Rahimi and Yadollahi (2011) searched computer anxiety level and its correlation with ICT integration into EFL teachers' classes in Iran. There were 254 EFL teachers in the study and the results stated a positive relationship considering computer and age factors. The demographic variables such as computer anxiety, gender, and working experience had no significant effect on the results of the study.

Moreover, the study at the University of West Georgia by Beggs (2000) investigated 156 full-time faculty members. The study revealed that student learning was improved by ICT and it definitely had an advantage over traditional teaching and it also increased students' interests. As a result, these beliefs strongly affected their ICT use and their continuation of innovation.

Dogoriti and Pange (2012) investigated ICT use and attitudes of FL teachers. The study took place at one technological institute and six public universities in Greece with 75 ESP teachers. 78% of the participants were females, and 22% were male teachers. The study revealed that although the infrastructure in universities was adequate, the ICT use was still limited. Moreover, the teachers' attitude toward technology was positive, but ICT tools are believed to be time consuming and not teacher-friendly. As a result, this might affect their ICT usage in their classrooms.

In a study with a descriptive quantitative design in Indonesian case, Cahyani and Cahyono (2012) found out that the teachers had positive attitudes towards the use of

technology in the language classrooms and they believed that technology was effective to improve second language learning among educators including 37 participants including 11 university lecturers. The study showed that technology is believed to be mandatory for engaging language instruction and also for success in language learning. Furthermore, language teachers were believed to take the responsibility to follow and keep up-to-date with the current learning theories, teaching methods and new kinds of technology. Parallel with the finding of a study conducted by Hişmanoğlu (2012), the suggestions were made to support prospective teachers about the practical ideas regarding using advanced ICT to make sure that they will become proficient future users of ICT.

All in all, the studies in Turkey and throughout the world show us the fact that positive attitudes play an important role in effective technology implementation and there is a positive correlation between attitudes towards technology and its use. These findings are important in order to reveal the factors behind effective technology integration into teaching. The highly emphasized factors are lack of teacher training and computer competence level of teachers.

Chapter 3

Methodology

The methodology of the present study is explicated in this chapter. First, information about the participants and the design of the study are presented. Second, this exploratory study focuses on two instruments which are going to be introduced in details to gain a better understanding of the study. Lastly, data collection procedure is given in details.

First, for this empirical study, the attitudes of EFL Instructors toward ICT and the purposes of their use and their ICT needs are investigated through the questionnaires specially designed for. It draws on data from the two questionnaires; the first one is to examine the attitudes of EFL Instructors toward ICT and the second one aimed to find out their purpose of ICT use and their ICT needs. Quantitative methods and qualitative analysis of some information from the questionnaires and the interviews were used for data analysis.

The study aims to address the following research questions:

1.What are EFL instructors' at UUS of FL attitudes toward the use of ICT?

2. How do the variables such as age, gender, teaching experience, computer skills affect EFL instructors' attitudes toward ICT?

3. Is there a relation between computer skills and attitude of EFL instructors?

4. What technological tools do instructors of English use for personal development?

5. What are the expectations of EFL instructors at UUS of FL from the administration regarding ICT support?

6. What are the participants' ICT needs?

7. What purposes do EFL instructors use ICT for?

3.1 Design of the Study

The sequential explanatory mixed-methods design is used in the present research which "focuses on collecting, analyzing and mixing both quantitative and qualitative data in a single

study or series of studies" (Creswell & Clark, 2007, p. 5). It is believed by researchers that various datasets should be mixed in order to have a complete picture of the problem instead of the datasets presented alone. In order to contribute to the depth of the study, semi-structured face-to-face interviews were conducted with EFL instructors and the data was analyzed qualitatively. Henceforth, quantitative and qualitative method were used in the study.

3.2 Setting

The study was conducted by the researcher at Uludağ University School of Foreign Languages, in Bursa, Turkey. In terms of institutional choice, needs and eligibility were primary concerns. The School of Foreign Languages gives compulsory or optional extensive English language education for students before they start studying their majors in their departments. The program lasts for nine months involving elementary, pre-intermediate and intermediate levels. All classrooms are equipped with computers without internet connection, classroom sound system, and projectors. The instructors can use i-tool versions of the course materials already uploaded in classroom computers with their e-book versions and audio files. Technology-integrated system is used for all skills including listening & speaking, reading, writing and also for grammar and vocabulary classes. Additionally, for personal use, instructors share their offices with their three other colleagues and each office has only one office computer which has an access to Internet, printer, and loudspeakers.

3.3 Participants

63 EFL instructors who work at Uludağ University School of Foreign Languages participated in the study. Of all participants, 53 were female and 10 were male instructors. From the same group, 12 instructors volunteered for the interview part to contribute to the richness of the study. In the results section, demographic features of the participants are given in details.

3.4 Instruments

There are two types of data collection instruments used in this study: two questionnaires (See Appendix 1 and 2) and face-to-face semi-structured interviews (See Appendix 3).

The first questionnaire aimed to find out teachers' attitudes toward ICT while the second questionnaire was used for measuring the ICT use and needs along with identifying the demographic features. Both questionnaires had an informing section about the aim of the questionnaire including a consent form and they also involve statements in which it was expected to get scores on a five point likert scale from the participants. ICT use and needs questionnaire also had an open-ended question at the end.

In the beginning, the researcher analyzed the results of the content validity of the scale and later for face validity, the wording of the first drafts of the questionnaires were controlled and then some items were modified, based on three experts' opinions. Finally, the participants received both questionnaires at the same time and in the same order, beginning with the attitude questionnaire.

3.4.1 ICT use and needs questionnaire. In order to collect information about the participants' ICT use and needs, the questionnaire was adapted from the study of Solmaz (2011) who investigated the ICT use and needs of Turkish EFL teachers who work at high schools in Diyarbakır. However, some of the items were originally generated by the researcher in order to modify them according to the participant profile instead of the Ministry of National Education setting. The questionnaire consists of 47 questions, 13 of them are multiple-choice questions and 34 of them are questions with a five point Likert scale. The responses in the scale are from strongly agree=5, to strongly disagree=1. It has one open-ended question at the end to address their expectations from the School of Foreign Languages' administration in terms of more effective ICT use. All questions were individual

items, whereas one item had a subscale, asking the tools they use for the professional development with specified given options and also one open-ended option named as 'other'. The reliability of the scale was found as (Cronbach-Alfa) .92. It was conducted in English as all participants were English teachers.

3.4.2 Teachers' ICT attitudes towards ICT questionnaire. Teachers' Attitudes towards Using ICT Questionnaire by Karaoğlan, Cavaş, Kışla, and Cavaş (2007) was used in the present study. It was used previously in the study of Cüre and Özdener (2008) who investigated teachers' success levels in using Information and Communication Technologies (ICT) and to find out their attitudes towards ICT. For the current study, the construct of attitude is a monolithic structure and the answers range from strongly agree=5 to strongly disagree=1 on a five point likert scale. For the items meaning positive towards ICT use such as item 1: "I find Information and Communication Technologies (ICT) use useful regarding reaching goals of academic programs." 5 point means positive attitude whereas 1 point means negative attitude. For reverse items such as item 2: "ICT use in the class causes extra work" 1 point means that the participants again have positive attitudes whereas 5 point means negative attitude for the reverse items. As a result, overall final results of the items between 1.00-2.50 standard deviation (SD) scores are regarded as negative attitude while the SD results between 2.50-3.50 are moderate, and finally the SD results above 3.50 can be regarded as positive attitude. Likert-type scale was found reliable with .862 alpha value. The aim of the items was determining the level of teachers' attitudes towards ICT. The original version of the questionnaire was in Turkish, so it was conducted in Turkish unlike the previous one.

3.4.3 Semi-structured face to face interview. Semi-structured face to face interview technique was used as another instrument in this study as a qualitative method to support the main data collection tool. Resulting data from the interviews were used to support the analyses of the survey data. In interviews, more or fewer questions can be asked to the

participants depending on their responses, or they may be asked to give replies in details since semi-structured interviews are not standardized. Besides, it is possible for the researcher to ask the questions again to avoid misunderstanding (Kajornboon, 2005).

As the present study focused on the ICT use and needs of EFL instructors and their attitudes towards ICT, it was thought that the semi-structured face to face interview technique would contribute the data-richness of the study. The interview questions were prepared considering the research questions of the study. There were 13 questions in the semi-structured interview and they were related to three main research questions of the study for which qualitative data collection was needed. The first four questions were asked in order to learn more about participants' computer use and computer skills. The following six questions aimed to find out advantages and disadvantages of ICT use for both teachers and learners. Finally, the last three questions were asked to find teachers' willingness of ICT use and their opinions about it.

The interviews took place during break times of the participants and usually in a suitable place like participants' offices. The researcher informed the interviewees about the aim of the research in general and the content of the interview in specific at the beginning of each interview. Prior to the interviews, oral permission of the interviewees was taken for recording the semi-structured interviews. The recordings were made by means of an IPhone device which has a recording feature. All of the interviews lasted between 20-25 minutes and were transcribed afterwards.

3.5 Data Collection Procedures

Quantitative (the questionnaires) and qualitative (the semi-structured face to face interview) data collection methods were applied in the present study. The researcher started by getting official permission from the administration for collecting data from EFL instructors who teach various levels at School of Foreign Languages. Once the official approval had been

arranged, the actual data collection process started with the two questionnaires given within the same time to all EFL instructors at the beginning of 2015-2016 spring semester. They were held on the same day, whereas the interviews were conducted on two subsequent days because of time limitations.

The total number of EFL instructors participating in the study was 63. They were all contacted on the same day in a special meeting and given some time for their answers. Considering the reliability and validity of the study, each participant was contacted, and all instructors (n=63) contributed to the study. 12 instructors volunteered for face-to-face interviews which was the crucial part of the study in terms of abovementioned reasons.

3.6 Data Analysis

Shapiro Wilk test was used for assessing whether the variables follow a normal distribution or not. Variables were reported as mean ± standard deviation (minimum:maximum) or median (minimum:maximum) values. According to normality test result as the data were found to be normally distributed, independent samples t test or Anova was used for between group comparisons. Categorical variables were compared by Chi square test or Fisher's exact test. The relationship between continuous and discrete variables was examined by using correlation analysis, and Spearman correlation coefficient was computed. Cronbach's Alpha for attitude questionnaire was .862 and for the computer skills questionnaire was .922. SPSS 21 was used for performing statistical analysis and the level of significance was set at α=0.05.

Chapter 4

Findings

The goal of the study was to reveal to what extent EFL instructors working at Uludağ University School of Foreign Languages use ICT in their teaching and their attitudes towards ICT. As well as determining the aim of the ICT use, the study also aimed to understand the EFL insructors' expectations from the school administration in terms of ICT support about both technical and training issues.

This chapter discusses the analyzed data of the questionnaire and the interview. In order to provide a broad picture of the results, the results of the quantitative and qualitative data are presented.

In the first section, demographic features of the participants were given. These features included the age, work experience, and education of the participants. The second section focused on the computer competence and usage frequency of the participants. The statistical data were presented and supported with figures for a better understanding of the research. The third section discussed the main research questions and evaluated the use of ICT by the participants and their attitudes. The variables such as gender, age, work experience, computer competence level, computer usage frequency which may affect the use of ICT were given in details. Following this section, in the end, the expectations of the participants from the school administration were presented by the support of qualitative data analysis.

4.1. Demographic Features of Participants

The number of participants who participated in the research and completed the questionnaire was 63 EFL instructors working at Uludağ University School of Foreign Languages. The participants were asked to complete the section of demographic features in the questionnaire as the demographic data of the participants may affect the results of the

research. The analysis of the demographic features of the participants was presented in table 2.

Table 2

Demographic Features of the Participants

Variable	Category	N	%
Gender	Female	53	84.1 %
	Male	10	15.9 %
Age	20-30	21	33.3 %
	30-40	34	53.9 %
	40-50	6	9.5 %
	50 and over	2	3.1 %
Education	English Language Teaching	47	74.6 %
	Literature	9	14.2 %
	Translation	6	9.5 %
	Linguistics / Philology	1	1.6 %
Working experience	1-5	13	20.6 %
	6-10	16	25.4 %
	11+	34	54 %

The analysis of the quantitative data showed that the frequency of participants considering gender was quite disparate: 84.1 % (n=53) of the EFL instructors in this study were female, whereas, 15.9 % (n=10) of the EFL instructors were male. A remarkable percentage of the participants was between 20-30 (n=21) and 30-40 (n=34) years old while the participants at the age of 40-50 were 6 people (n=6), and 50 and over were only 2 (n=2). According to the participants' graduation data, the majority of EFL instructors 74.6 % (n=47)

graduated from English Language Teaching Department. Following this, the small number 14.2 % (n=9) of participants graduated from Literature, similarly 9.5 % (n=6) of participants graduated from Translation Department. On the other hand, only one EFL instructor 1.6 % (n=1) was a graduate of Linguistics / Philology Department.

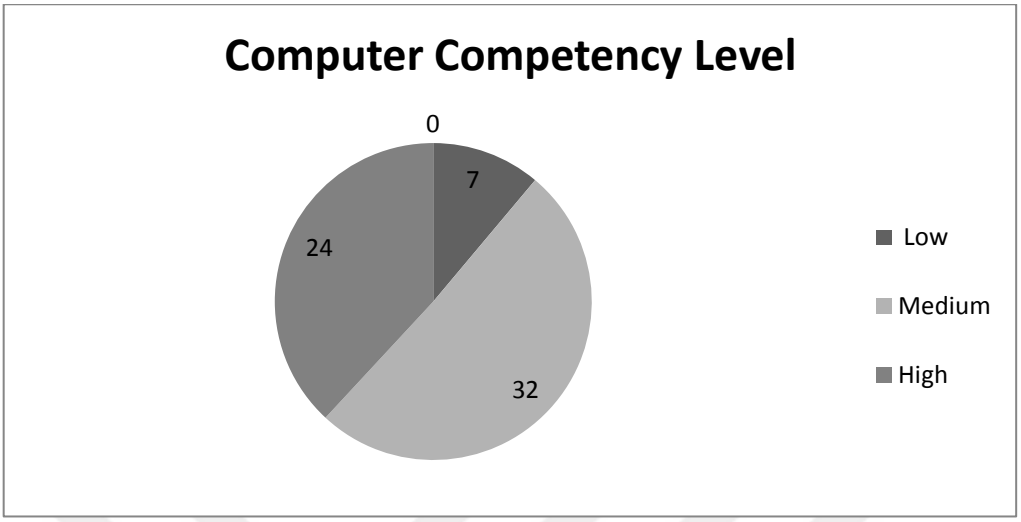
The data related to working experience of EFL instructors showed us that 20.6 % (n=13) of EFL instructors had 1-5 year working experience, in the same way 25.4 % (n=16) of them had 6-10 year working experience. The rest of them 54 % (n=34) had a working experience of 11 years and above.

4.2 Defining Computer Competencies and Usage Frequencies

The participants were asked to respond to computer competency items of the questionnaire to gain a better understanding of their features. The computer competency level of the instructors was important to determine their attitude level. The instructors were asked to select between the low, medium and high level of computer competence. The option of 'Low' was for the limited knowledge of computer usage and basic skills of technology usage, and the option of 'Medium' represented intermediate knowledge of computer usage and being competent of using basic skills required for the usage of technology. The option of 'High' represented an advanced level of knowledge considering computer usage and high technology usage skills. The data showed that half of the teachers 53.3 %, (n=32) had 'medium' level of computer competence. 42.2 % (n=24) of the teachers considered their level of computer competence as 'high'. Only 4.4 % (n=7) of the participants reported their computer competences as 'low' (Chart 1).

Chart 1

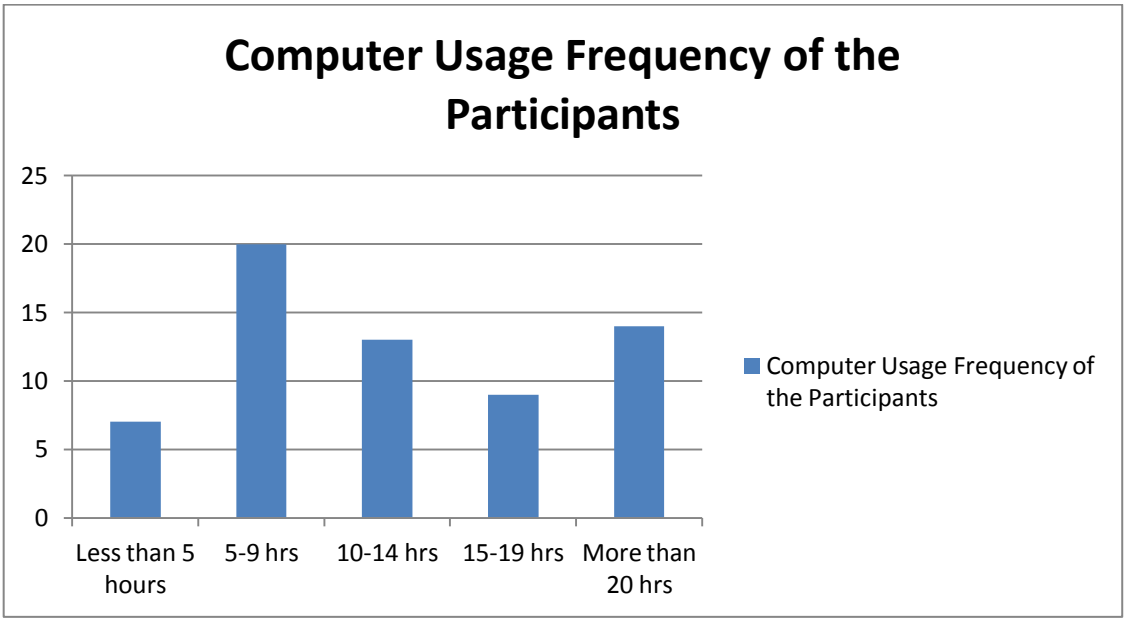
Computer Competency Level of Participants



The participants of the study were also asked about their weekly computer usage frequencies. As seen in the figure below (Figure 3), a small number of the teachers, 42.9 % (n=27) indicated that they used computers less than 9 hours a week. 20.1 % (n=13) of the teachers used the computer between 10 to 14 hours a week, and 37 % (n=23) of them used more than 15 hours a week (Figure 3).

Figure 3

Computer Usage Frequency of the Participants



4.3 The Attitudes of EFL Instructors towards ICT

The attitudes of EFL instructors towards ICT were the main topic of the study. As a result of this, both quantitative data (the questionnaires) and qualitative data (semi-structured interviews) were collected and analyzed. The results of the data are provided below.

4.4 Quantitative Results from the Attitude Scale

The results of the collected data from the questionnaires are presented under this section in details as the quantitative data was the main instrument used in the present study.

One of the questionnaires was conducted to find out teachers' attitudes towards using ICT. Cronbach Alpha for the attitude questionnaire was 0.86 and the level of significance was set at α=0.05.

Table 3

Attitudes of EFL Instructors towards ICT

	M	SD	n	95% CI for Mean Difference	t	df
Attitude	3.76	0.398	63	0.6629 , 0.8626	15.269*	62

* p< .05

Specifically, our results suggest that EFL instructors at Uludağ University have moderately positive attitudes towards the use of ICT. A one-sample t-test was conducted to determine the attitudes of EFL instructors towards ICT. The participants received statistically higher scores (M = [3.76], SD = [.398]), t (62) = [15.269], p = [.000]. It can be seen that the attitudes of EFL teachers were yielded statistically significant difference regarding the mean score. Appendix 4 shows the descriptive statistics for the attitude questionnaire.

The aim of the questionnaire was about the attitudes of EFL instructors towards using ICT in their teaching. There were 38 items which aimed to identify EFL instructors' attitudes. According to the mean scores of the related data, the five items with the highest mean scores

are (I 1, I 4, I 10, I 19, I 32) ranging (between M=4.75 and M=4.40) and also five items with the lowest mean scores are (I 5, I 21, I 28, I 30, I 35) ranging (between M=3.56 and M=3.08).

One of the items with the highest mean score (M=4.75) was the first item which emphasizes the use of ICT in terms of teaching goals. The data revealed that teachers have positive attitudes considering ICT use in their teaching process to get the aimed results in their teaching.

Another item with one of the highest mean score (M=4.52) was the fourth, as it stressed that lessons with ICT use could be much more interesting than teaching with the traditional methods. Since positive beliefs can be regarded as positive attitudes, the data revealed from this item supports the idea of ICT use in classroom teaching.

The tenth and the nineteenth items (M=4.70), (M=4.40) were closely related to each other, both supporting the idea of using audio-visual materials in their teaching. If teachers want to use more authentic audio-visual materials in their teaching, they will need more help from ICT based materials. The last item with one of the highest score was thirty-second (M=4.40) which supported that ICT use increases the motivation in the class.

4.4.1 The Effect of Gender on the Attitudes of EFL Instructors towards Using ICT

The effect of gender on attitudes towards ICT use was analyzed with the help of independent-samples t-tests as the data was distributed homogeneously. Independent-samples t-tests didn't yield any statistically significant difference for genders as the significance value was found as .375 (Table 4). Moreover, a partial eta squared test was calculated comparing the frequency of attitudes in male and female participants. No significant difference was found between the variables x^2 (1, N = 63) = .013, p <.05.

Table 4

Results of Independent-Samples t-test for the Effect of Gender on the Attitudes of EFL Instructors towards using ICT

	n	M	SD	t	df	Sig
Female	53	3.74	.399			
Male	10	3.87	.386	.895	61	.375

p< .05

4.4.2 The Effect of Age on Attitudes towards ICT by EFL Instructors

The age of the participants was taken as an effective factor which may affect the use of ICT and their attitudes. As a result, One-way ANOVA test was used in order to reveal any statistically significant results. The results are presented in Table 5. A partial eta squared test of independence was performed to examine the relation between age and attitude. The relation between these variables was significant, x^2 (3, N = 63) = .130, p <.05.

Table 5

Results of ANOVA for the Effect of Age on Attitudes towards ICT by EFL Instructors

	n	M	SD	F	Sig
20-30	21	3.96	.33		
30-40	34	3.67	.42	4.290	.018
40-50	6	3.62	.14		
50 and over	2	3.64	.31		

p< .05

The ANOVA results indicated that the level of attitude decreases as the participants get older. There were significant differences between the ages of 20-30 group and 30-40 group. Participants aged between 20 and 30 (M=3.96) have positive attitudes and they are

followed by 30 and 40 year-old group (M=3.67), 40 and 50 year-old group (M=3.62) and the participants who were 50 and above age group (M=3.64). According to post hoc Tukey test results, the significant difference existed between the ages of 20-30 group and 30-40 group. As the table displays, no significant difference was found between the ages of 30-40 and 40-50 group as well as between the ages of 20-30 group and 40-50 group.

Table 6

Results of Post Hoc Tukey for the Effect of Age on Attitudes towards ICT by EFL Instructors

Section (I)	Section (J)	Mean (I-J)	Sig.
20-30	30-40	.291	.021
	40-50	.339	.139
30-40	20-30	-.291	.021
	40-50	.048	.956
40-50	20-30	-.339	.139
	30-40	-.048	.956

p< .05

4.4.3 The Effect of Department of Graduation on EFL Instructors Attitudes towards Using ICT

The participant EFL instructors at Uludağ University School of Foreign Languages have various background majors. The majority of instructors graduated from English language teaching department (n=47), whereas nine of the participants graduated from literature and following these majors, there are participants from translation (n=6) and linguistics/philology (n=1) departments. The data were analyzed using one-way ANOVA test. The results showed no significant difference between the department of graduation on attitudes towards ICT by EFL instructors (Table 7).

Table 7

Results of ANOVA for the Effect of Department on Attitudes towards ICT by EFL Instructors

	n	M	SD	F	Sig
English Language T.	47	3.78	.39		
Literature	9	3.75	.40	.118	.889
Translation	6	3.85	.20		
Linguistics/Philology	1	2.68	.31		

p< .05

4.4.4 The Effect of Working Experience on Attitudes towards ICT by EFL Instructors

The effect of working experience of the EFL instructors was taken as a factor to see if their attitudes were affected by their teaching experience or not. Working experiences of the participants were categorized into four main groups as followed: 1-5 years of experience, 6-10 years of experience and 11 years of experience and above.

As part of the study, the statistical analysis was performed by using one-way ANOVA test. Accordingly, there was a significant difference between groups regarding working experience (p=.018).

In order to investigate between which groups the significant difference occurred, the test conducted was one-way between subjects ANOVA. There was a significant effect of working experience at the p=.018 level. The results a post-hoc Tukey HSD test indicated that the 1-5 years of experience group (M=4.08 and SD=0.228) did significantly differ from 6-10 years of experience group (M=3.82 and SD=0.394) and 11+ years of experience group (M=3.61 and SD=0.375). Taken together, these results suggest that the less working experience has an effect on the attitude. Specifically, the group which has 1-5 years of experience possess positive attitudes towards ICT significantly more than the other two groups of work experience. A partial eta squared test of independence was also performed to

examine the relation between work experience and attitude. The relation between these variables was significant, x^2 (2, N = 63) = .219, p <.05.

Table 8

Results of ANOVA for the Effect of Work Experience on Attitudes towards ICT by EFL Instructors

	n	M	SD	F	Sig
1-5	13	4.08	.22		
6-10	16	3.82	.40	8.432	.001
11+	34	3.61	.38		

p< .05

4.4.5 The Effect of Internet Access at School on Attitudes of EFL Instructors towards ICT

An independent-samples t-test was conducted in order to see the effect of internet access at school. There was a significant difference in the scores for internet access at school (M=3.78, SD=0.38) and no access at school (M=3.58, SD=0.43) conditions; t (61)=1.33, p = 0.18. These results suggest that internet access at school does not have an effect on attitude.

Table 9

Results of Independent Samples T Test for the Effect of Internet Access at School on Attitudes of EFL Instructors towards ICT

	n	M	SD	t	df	Sig
Yes	55	3.78	.387	1.336	61	.186
No	8	3.58	.439			

p< .05

4.4.6 The Effect of Internet Access at Home on Attitudes of EFL Instructors towards ICT

An independent-samples t-test was conducted to compare attitudes of those with an internet access at home and no internet access conditions at home. Statistically, no significant difference was found between the scores for internet access at home (M=3,76, SD=0.40) and those with lack of internet access at home (M=3.84, SD=0.26) ; t (61)=0.28, p = 0.77. These results suggest that internet access at home does not have an effect on attitude. Specifically, our results suggest that nearly all instructors have an internet access at home and this has no significant effect on attitude.

Table 10

Results of Independent Samples T Test for the Effect of Internet Access at Home on Attitudes of EFL Instructors towards ICT

	n	M	SD	t	df	Sig
Yes	61	3.76	.401	.286	61	.399
No	2	3.84	.260			

p< .05

4.4.7 The Effect of the Social Media Membership on Attitudes towards ICT by EFL Instructors

An independent-samples t-test was used in order to compare attitudes of participants who have or does not have social media membership. There was no significant difference in the scores for the social media membership (M=3,79, SD=0.40) and no social media membership (M=3.61, SD=0.36) conditions; t (61)=1.26, p = 0.21. These results suggest that the social media membership does not have an effect on attitude.

Table 11

Results of Independent Samples T Test for the Effect of the Social Media Membership on Attitudes towards ICT by EFL Instructors

	n	M	SD	t	df	Sig
Yes	53	3.79	.40	1.261	61	.513
No	10	3.61	.36			

p< .05

4.4.8 The Effect of Internet Use on Attitudes of EFL Instructors towards ICT

An independent-samples t-test was conducted to compare attitudes of those who use internet at home and those who use internet at school. There was no significant difference in the scores of those who use internet at home (M=3,80, SD=0.42) and those who use internet at school (M=3.65, SD=0.30) ; t (61)=1.32, p = 0.19. These results suggest that internet access whether at home or at school does not have an effect on attitude. Specifically, our results suggest that nearly all instructors have an easy access at home and this has no statistically significant effect on attitude.

Table 12

Results of Independent Samples T Test for the Effect of the Place of Internet Use on Attitudes of EFL Instructors towards ICT

	n	M	SD	t	df	Sig
Home	46	3.80	.421	1.321	61	.057
School	17	3.65	.304			

p< .05

4.4.9 The Effect of the Computer Usage Frequency on Attitudes of EFL Instructors towards ICT

A one-way within subjects (or repeated measures) ANOVA was conducted to compare the effect of computer usage frequency on attitudes (Table 13). These results suggest that computer usage frequency really does not have an effect on attitudes towards ICT.

Table 13

Results of ANOVA for the Effect of the Computer Usage Frequency on Attitudes of EFL Instructors towards ICT

	n	M	SD	F	Sig
Less than 5 hours	7	3.75	.32		
5-9 hours	20	3.75	.40		
10-14 hours	13	3.69	.42	.314	.868
15-19 hours	9	3.73	.32		
More than 20 hours	14	3.85	.47		

$p < .05$

4.4.10 The Effect of the Computer Competency Level on Attitudes of EFL Instructors towards ICT

The effect of computer competency level of the participants was taken as a factor to see if they had any positive or negative effect on attitudes towards ICT. Computer competency level of the instructors was categorized into three main groups as followed: low, medium, high.

As part of the study, the statistical analysis of the data concerning the effect of computer competency level on attitudes was performed using one-way ANOVA test. The results indicated a higher mean score frequency for the teachers with high computer competency level compared to those with the low and the medium computer competency

level. The mean score for the instructors with the high computer competency level was 3.95, while it was found to be 3.63 for the participants who had the low computer competency level and 3.64 for the participants who had the medium computer competency level. Statistically analyzed data showed significant effect of the computer competency level of the instructors on their attidues towards ICT (Table 14). According to a partial eta squared test, the attitude and computer competency level were calculated. There was a significant difference found between the variables x^2 (2, N = 63) = .151, p <.05.

Table 14

Results of ANOVA for the Effect of the Computer Competency Level on Attitudes of EFL Instructors towards ICT

	n	M	SD	F	Sig
Low	7	3.63	.23		
Medium	32	3.64	.39	5.316	.007
High	24	3.95	.20		

p< .05

A post hoc Tukey test results showed that (Table 15), the significant difference existed between medium and high computer competency levels. High computer competency level group was significantly different from the other two groups.

Table 15

Results of Post Hoc Tukey for the Effect of Computer Competency Level on Attitudes towards ICT by EFL Instructors

Section (I)	Section (J)	Mean (I-J)	Sig.
Low	Medium	-.009	.998
	High	-.321	.117
Medium	Low	.009	.998
	High	-.312	.008
High	Low	.321	.117
	Medium	.312	.008

p< .05

4.4.11 Professional Development Tools Used by EFL Instructors

As a part of the present study, participants were asked to share the professional development tools which have contributions to their professional level. It was thought that specific names of the tools given by the researcher in the multiple choice format would provide a valuable data in order to identify the most popular tools used for their professional development. For this reason, one open-ended option of the questionnaire was used for this aim under the title of 'other please specify', and it was kindly requested from teachers that they can contribute to study by writing down the names of the tools that they mostly use for professional purposes.

The data were analyzed and it was seen that all of the participants provided 146 replies. After analyzing the data, there were eleven main types of the tools used by the participants. These tools are categorized as Dictionaries (n=40), Newspapers (n=32),

Magazines (n=31), Blogs (n=22), Online Journals (n=9), Internet (n=4), Articles (n=3), Books (n=2), Websites (n=1), Movies & Songs (n=1), Conferences (n=1).

Table 16

Percentages of Professional Development Tools Used by EFL Instructors

Professional Development Tools	n
Dictionary	40 (63.5 %)
Newspaper	32 (50.8 %)
Magazine	31 (49.2 %)
Blog	22 (34.9 %)
Online Journals	9 (14.3 %)
Internet	4 (6.3 %)
Articles	3 (4.8 %)
Books	2 (3.2 %)
Websites	1 (1.6 %)
Movies&Songs	1 (1.6 %)
Conferences	1

4.5 Questionnaire Results of ICT Use and Needs Questionnaire

The second questionnaire was conducted to collect information about the participants' ICT use and needs. Cronbach Alpha for this questionnaire was .92 and the level of significance was set at α=.05. See appendix 5 for descriptive statistics of the ICT use and needs questionnaire.

There were a total of 36 items in the questionnaire which aimed to identify EFL instructors' ICT use and needs. According to the mean scores of the related data, there were 5 items (I 5, I 7, I 8, I 23, I 35) with the highest mean scores (between M=4.71 and M=4.40)

and also 5 items (I 9, I 18, I 19, I 20, I 21) with the lowest mean scores (between M=1.29 and M=2.84).

One of the items with the highest mean score (M=4.71) was the fifth item which emphasizes the use of ICT for personal development. The data revealed that instructors use Internet for searching the meaning of English words that they don't know online which contributes a lot to their personal development.

Another item with one of the highest mean score (M=4.70) was the seventh, as it stressed that the instructors always use some online dictionaries. Online dictionaries become popular in the technology era, the data revealed from this item supports the use of the Internet for personal development as well.

Item 35 (M=4.46) can be a good example of Internet use for professional development. It supports the idea of encouraging the students to improve their language skills by using the Internet. Teachers can use some websites for up-to-date knowledge for their professional development, and they can also share them with their students and encourage their students to do so.

Item 8 (M=4.44) is about searching for the pronunciation of English words online. It is closely related to online dictionaries idea but with a lower mean score. It can be revealed that Internet use for the pronunciation of English words online is common among teachers and this can be a good example of ICT use for personal development again.

Item 23 had one of the highest scores (M=4.40) which supported the idea of Internet use for professional development again as the teachers believe that they can find more resources related to ELT on the Internet.

Two of the lowest items which are closely related to each other are about owning a website (or blog) with Turkish (M=1.29) or English (M=1.41) content.

4.6 The Relationship Between Attitude towards ICT and the ICT Use and Needs

A Pearson product-moment correlation coefficient was computed to assess the relationship between attitude towards ICT and the ICT use and needs. There was a positive correlation between the two variables, r = .329, n = 63, p = .008. A scatterplot summarizes the results (table 17). Based on the results of the study, there was a strong, positive correlation between attitudes and ICT use and needs. Increases in attitudes towards ICT were correlated with increases in ICT use and needs.

Table 17

The Results of the Pearson Product-Moment Correlation Between Attitude towards ICT and the ICT Use and Needs

	N	r	p
Attitude ICT Skills & Use	63	0.329	0.008

p< .05

4.7 Interview Results on the Use and EFL Instructors' Attitude towards ICT

As mentioned earlier, the qualitative data were collected through follow up interviews. The interviews were carried out with 12 EFL instructors, the aim of which was to get an in depth understanding of the items in the questionnaire. The interview questions were formulated through the questionnaire items. In the first place, 13 questions were developed related to the questionnaires. It was really important that the participants represent the exact constitution for the population based on an objective perspective to ensure the reliability of the study. As a result, there were three main criteria such as gender, age and working experience. Of all 12 participants, 5 EFL instructors were male whereas 7 EFL instructors were female. 5 of the participants were between the ages 25-35 years old, and moreover, 5 of the participants were between the age 35-45, and the rest 2 interview participants were above

45 years old including one male and one female instructor. Firstly, the qualitative data were transcribed and color-coded according to themes. Next, thematic and content analyses were applied to present common and outstanding themes with the example quotations from teachers' own statements. According to the analyzed data, the broad themes are teachers' frequency of ICT use, teachers' ICT training background and their training need, ICT level of competence, integration of ICT, advantages and disadvantages of ICT for both learners and teachers, motivation, ICT as a solution, a threat or an advantage, ICT suitability for typical Turkish classrooms, teachers' willingness to use ICT, frequency of their ICT use in teaching, and their expectations from the administration.

The Frequency of ICT Use. When asked about how often they use ICT, computer and the Internet, all teachers stated that they always use ICT by stressing everyday usage. All twelve teachers asserted that they use their mobile phones and check their social media accounts everyday.

"I use computer in the evening and use internet on my phone everyday to check the news and for social network, I use it 90% of the day." (Interviewee 6)

"I try to use as much as I can. Of course computers and internet are inseperable things. I use twitter and whatsapp." (Interviewee 9)

"I use them all the time. I use the computer and internet everyday. I mostly use my phone." (Interviewee 11)

ICT Training. When instructors were asked if they had ever had any educational training to use ICT more effectively, all participants agreed that none of them got special training about ICT. Only two of them said that they got a class about educational technology during their undergraduate studies however they claimed that they need some update.

"In my undergraduate years, we had some trainings for wikispaces. We tried to set up some pages using wikispaces and also got some education to use dreamweaver and adobe flash." (Interviewee 6)

"When I was at university, we had a class about educational technology but I need to update my knowledge." (Interviewee 9)

The other ten teachers stated that they learnt how to use ICT based on their own efforts.

"Well, I have never had but I have been surfing the net about ICT to grasp more information." (Interviewee 5)

"It is about your experience. I have not joined any of them. But I have some ideas about how to use them." (Interviewee 12)

The Need for ICT Training. Furthermore, they were asked if they thought they needed a training course to use ICT more effectively. Nine instructors agreed that they needed a training course for effective ICT use because of their desire to use ICT more professionally, their low computer competence level and their beliefs about the power of colleague collaboration for effective use of ICT.

"Of course, I need a training course because I wish I used more ICT in my profession. I use some amount of ICT and it is by trial and error, I learned most of them by chance thanks to colleagues." (Interviewee 3)

"Definitely.Because somehow I am afraid of using technology in the classroom. Sometimes I have students to open a video and listening tracks. I need to update my knowledge about ICT." (Interviewee 8)

"Yes. I need it because you need to know at what and which point you need to use them. Also, having training courses and getting ideas from your colleagues will help you." (Interviewee 12)

Three of the interviewees claimed that they do not need training and felt themselves competent enough for it.

"No. Because I am the president of the technology committee at school." (Interviewee 4)

"In my teaching, I don't really think I need training but if there is a new software or hardware to use, of course we need a basic training for that." (Interviewee 6)

ICT Level of Competence. All twelve instructors agreed about the importance of ICT competence. Although their competence levels vary, their opinions are mostly related to positive correlation between their ICT level of competence and their ICT use. They definitely support having some knowledge about ICT including basic components at least in order to deliver more effective courses.

"Of course, the more you know about ICT, the more you use them. They are paralel." (Interviewee 4)

"Definitely, it is true. The ICT competence level affect ICT use. Without knowing the basic components of i-tools in our classrooms, we cannot deliver a course." (Interviewee 5)

"Of course yes. It directly affects. Because if I am good enough, I can use these tools a lot in my classroom and different methods as well." (Interviewee 10)

"Yes. If you do not have any computer literacy, then you may not use them effectively. There is a positive correlation between them." (Interviewee 12)

Integration of ICT in Language Classes. In addition to ICT based materials that book publishers supply, when asked about ICT integration in language classes, all twelve participants indicated that they find ICT integration necessary mostly because of the digital era we are in. With the help of ICT integration, the classes would be more effective, motivating and appealing for students. We have a lot of opportunities in our classrooms such as computers, projectors etc. and our students are closely interested in using the internet as the

majority is digital natives. As a result, its integration is a must for every teacher who wants to be professional in language teaching according to participants.

"It is necessary because young generation use ICT a lot in their daily lives. It would be a good idea to use ICT in the class and it would be more motivating for them and I think they will be more attentive in the class. The classes will appeal more to them." (Interviewee 3)

"Nowadays, using ICT is very necessary for the young generation because our age is computer age. We must use ICT effectively. As far as I can understand from young generation's behaviours, small children, even when they are born, are able to use computers. We are the old generation. Although I am a digital immigrant, I use ICT for my classes." (Interviewee 7)

"Yes, I strongly believe that it is necessary. We need to use technological devices in the classroom otherwise, we cannot catch their interest. Also, we are in a digital age, we have to use it." (Interviewee 10)

Advantages and Disadvantages of ICT for Learners. When asked about the advantages of ICT for learners, interviewees listed many advantages of ICT according to their own experiences. According to the analyzed data, there are five main points regarding the advantages of ICT : variety of resources, easiness of reaching information, no time limitation for the use and visualization of the materials, and as a result of all these, it enhances motivation. Moreover, it requires less paperwork and caters different learning needs so students are actively involved in learning process.

"ICT promotes interaction among students and also the interaction from teacher to student and from student to teacher and it could be beneficial for visualizing the materials." (Interviewee 5)

"ICT requires less paperwork, students do not have to struggle to find information. It is accessible and the students are eager to do it for themselves, they actually can touch the screen and click it on the computers and they feel more interacted." (Interviewee 6)

"…it will cater different learning needs." (Interviewee 8)

Of course, there are some disadvantages as participants stated such as ICT can be a great distractor unless it is planned carefully, and teachers' computer competence level is not adequate to promote the use in the classroom. However, the most striking disadvantage that two instructors stated is about students' lack of note-taking skills because of new technologies.

"Learners do not use paper and pencil in note taking. That affects them in a bad way. With ICT, they know that they can get back to their notes anytime." (Interviewee 9)

"Student do not spend extra time for taking notes (it is always there) or doing traditional homework and it may make students a little bit lazy" (Interviewee 12)

Advantages and Disadvantages of ICT for Teachers. The participants agreed that ICT has both its advantages and disadvantages for teachers. When asked about it, the participants mentioned about its practicality to deliver a lesson, time-saving mode, less paperwork, more student involvement and easiness of use instead of traditional books.

"You do not need to deal with a lot of paperwork and keep a track of what you do because everything is already available on the internet. It automatically saves what you do. You can use them again and again. Practicality- it saves time for teachers." (Interviewee 6)

"…more student involvement and will help you refresh your teaching habits" (Interviewee 8)

"it makes our lives easier, I can just show them from the board instead of writing." (Interviewee 11)

"…getting rid of monotonous classes." (Interviewee 12)

On the other hand, the disadvantages mentioned are related to less-qualified teachers' technical problems and classroom management.

"If the teachers are non-qualified or unskilled, probably they will have trouble using it first. Maintaning the classroom discipline while using ICT." (Interviewee 5)

"It is very difficult to manage the class once all the phones are in use. You cannot track every phone. Management is a big problem." (Interviewee 6)

"In the classroom, maybe there will be some technological failures." (Interviewee 10)

Motivation. The participants' responses show that motivation is a key factor to use ICT more in classes with the supporting ideas below. Two participants pointed out that following the book can be boring and other three participants stated that ICT gives instructors a chance of using variety of activities as well as ready made teaching materials.

"…We give them a chance with their toys. It is their toys. Playing the game with their toys is more appealing to them." (Interviewee 3)

" Definitely, it does. Probably, students are better motivated when they see visual materials. They will not get distracted. If the teachers just follow the book, it will be more boring for them." (Interviewee 5)

" Of course because the generation is changing. The students spend most of their time by using their smartphones or computers. Visual and audio materials increase their motivation." (Interviewee 9)

" Yes, especially, they are familiar with it a lot. They see it as a part of learning. So learning is a part of life. It is different from the books and different methodology." (Interviewee 10)

However, two participants stressed the importance of using a variety of ICT based materials.

"For a short time yes. Once, I use Kahoot in my class and at first they were really interested in using it. But for the second time in the same class, they were not so interested. The students

are easily get distracted. You need to use another ICT material for the next lesson, you cannot use the same ICT material again and again." (Interviewee 6)

"It depends. It usually increases motivation. After some time, students may lose their interest but if you include ICT activities in your class, it may help you involve your students more in your class." (Interviewee 12)

ICT as a Solution for Educational Problems. When asked about the ideas whether ICT would solve some of the problems in education we are facing, seven instructors agreed with the idea and gave examples. They added that when used effectively, ICT could solve some problems such as engaging more students in the class and it makes lessons enjoyable. But of course, they also stressed that teachers need training for it.

"…In terms of individualizing learning a new language, it is helpful. Students can use ICT toools that appeal to them. It helps them to learn better. They are free, a group of people with different levels and interests in one class, ICT can overcome these problems." (Interviewee 2)

"Maybe the pronunciation problems are going to be solved in a way by listening the correct pronunciation from native speakers. You can easily reach authentic materials." (Interviewee 4)

"For example when we start the class, the students do not have any idea about the background of the topic. You can lead them to use ICT to find out more about the topic. It makes lessons enjoyable and interesting for them. They can search the info they need and they can save time." (Interviewee 10)

ICT – a Threat or Advantage. Instructors were also asked about whether ICT use is a threat or advantage for their teaching. All twelve participants reported that advantages are more than its threats.

"…The only threat is that the projector or any ICT tool you use in the class can break down." (Interviewee 2)

"It could be an adavantage because it saves time and it can be used again and again. However, it could also be a threat if it is not managed well by the teacher." (Interviewee 6)

"Definitely an advantage. It is more effective than traditional handouts." (Interviewee 8)

"Some teachers may regard as a threat but it may be an advantage. You can include many activities from ICT environment." (Interviewee 12)

Suitability for Typical Turkish Classrooms. One of the interview question inquired about whether typical Turkish classroom is suitable for teaching with ICT or not. The data analysis showed that all twelve participants agreed that it is not suitable for teaching with ICT as most Turkish classrooms are lack of basic technological equipments and the population does not let effective teaching with ICT.

"Not in all classrooms. Some classrooms have computers but no projector or internet. Teachers have to know how to use offline tools." (Interviewee 6)

"In terms of classroom setting and population, it is not. Equipment availability is to some extent yes." (Interviewee 12)

Willingness to Use ICT. All participants agreed that they are really willing to use ICT in their teaching except one participant who stressed the importance of using traditional pen and paper combination.

"Yes but I am half a traditional and half a modern teacher. I want my students to be friends with pen and pencil. I cannot have a whole class only with ICT." (Interviewee 9)

Frequency of ICT Use in Teaching. The interview question which is related to the frequency of ICT use in instructors' teaching revealed that eight of the participants use it very often and try to use it whenever possible in their teaching. The other four participants stated that they sometimes prefer using ICT in their teaching.

Expectations from the Administration. When asked about the expectations of EFL instructors from the administration, we can see that this question was also in the open-ended

section of the questionnaire. Internet access in all classrooms was stressed again by the participants. Apart from that they added:

"We need a support team. Because lecturers do that in their free time and they are not experts and it is not their job. There might be a network for students and teachers, a safe, pedagogic place for students and lecturers." (Interviewee 1)

"We as teachers should have personal computers and internet access at school in every class." (Interviewee 9)

4.8 Expectations of EFL Instructors for the Efficient Use of ICT

The last research question is focused on the expectations of EFL instructors from the administration in order to use ICT more efficiently. As a result, quantitative data (the questionnaire) collection method was conducted. The questionnaire had a specific open-ended section for this research question of the present study and the results of the data were shared by naming the instructors such as P1 (Participant 1), P2 (Participant 2), and P3 (Participant 3). A total of 20 EFL instructors at Uludağ University School of Foreign Languages wrote some comments to this open-ended section.

According to the analyzed data, it was easily seen that a great deal of the participants had supported the idea of having Internet access in all classrooms at Uludağ University School of Foreign Languages. Below, some of these quotations are provided.

"P6: I think we should have a computer lab at once and all classes must be equipped with PCs, projectors and internet access."

"P10: Internet connection should be enhanced and the content of courses could be more related to up-to-date knowledge uploaded on the net."

"P16: There should be Internet access in classrooms. Sometimes I come up with an idea and I want to share it with students. I just need to have the luxury to act more spontaneously in class."

"P52: All the classrooms should have an Internet access in order to reach any information when necessary."

On the other hand, two instructors mentioned about their need regarding owning the technological equipments financed by school administration. It was believed that new equipments would facilitate their teaching. The following quotations may exemplify the situation.

"P19: I expect the school to give every instructor a laptop or a tablet or a PC at least to freely browse online materials and download."

"P63: Each instructor should be occupied with laptops at school of FL."

Additionally, some teachers pointed out the importance of technology training as part of professional development. They strongly believe that their computer competence level is not high enough to cover ICT supported teaching. If it was given to them in a ready-format, they are more willing to use them in their teaching. Their urgent need considering up-to-date educational technology training can be seen from the analyzed data. They expressed their views with the related quotations provided below.

"P44: I expect to have more seminars and trainings on how to use ICT and web-based resources more efficiently."

"P51: There may be workshops for more effective use. When there is a ready-made PowerPoint presentation, I can use them."

"P53: We should take regular courses about it to keep updated."

Lastly, the instructors wrote and specified about two other points related to their expectations from the administration of Uludağ University School of Foreign Languages. Those quotations are provided below:

"P3: We have made a big progress to use ICT but we need to have more progress."

"P45: -make use of smart boards available for all classes

-Use smart board versions of coursebooks.

-Create an e-library consisting of e-books, movies, songs, etc."

"P54: School of foreign languages can equip classes with more advanced and high- tech devices in order for our students and teachers to better learn and teach English, in particular. ICT is regarded as a highly innovative and broad discipline. Therefore, it must be utilized properly in a classroom context. There have been a great deal of opportunities brought by ICT. Developing blogs in English, creating websites, social networking and microblogging are just a few to name. However, emphasis should be placed more on proper use and application in educational context. We may create blogospheres for our school of foreign languages first, then encourage our students to be actively involved in it. Another idea would be to make use of I-tools designed inside our coursebooks. That would provoke authentic use of English and mean genuine exposure to the content."

Chapter 5

Discussion

5.1 Introduction

The present study mainly examined the ICT needs and use of EFL Instructors with a focus on their attitudes toward ICT by considering some variables such as age, gender, time, teaching experience and computer skills. In this chapter, firstly, the results concerning the five research questions are discussed. Then, this chapter addresses all research questions by summarizing the results and presents a picture of factors regarding the complexity involved in ICT integration by discussing the results of the study in the light of the existing literature.

5.2 Discussion of the Findings

In this present research, 63 EFL instructors working at Uludağ University School of Foreign Languages completed the two questionnaires. 12 of these participants were volunteers for the semi-structured face to face interviews which were conducted to get qualitative data as well. The current study consisted of several research questions to analyze the ICT needs and use of EFL instructors with a focus on their attitudes toward ICT. However, the extensive literature review revealed that though teachers had positive attitudes towards technology, technology implementation and effective use of it remained peripheral or limited in many cases.

5.2.1 Discussion related to the findings of research question one. The first research question inquired about EFL Instructors' at UUS of FL attitudes toward the use of ICT. The current emphasis on external and internal factors regarding attitude, besides teacher attitudes and characteristics were also taken into consideration for the variability in technology integration or acceptance in recent studies. The quality of this integration has notably increased in the last twenty years (Agbo, 2015). In fact, most of the previous studies concentrated either merely on teacher's self-assessment of skills, beliefs and attitudes or

merely on teacher's perception of external variables such as technical or pedagogical support. Few studies focused on teachers' attitudes towards ICT as a result this study aimed to find out the results related to EFL instructors' at UUS of FL attitudes toward the use of ICT. The quantitative data collection tool (attitude questionnaire) was used to answer this research question. The items in the questionnaire focused on determining the level of teachers' attitudes towards ICT.

Findings from the statistical data showed that the attitudes of EFL teachers were considered moderately positive regarding the mean scores. Specifically, our results suggest that EFL instructors at Uludağ University have moderately positive attitudes towards the use of ICT and in addition to this, the results from the qualitative data showed that instructors use computer and the Internet for personal needs more often than using them in teaching practices to mediate learning. Also, their feelings about the lack of computer competence level seemed to lower general attitudes towards ICT use in their teaching. Similarly, in a study with 100 EFL teachers in Iran, Heirati and Alashti (2015) found that the participants had positive attitudes toward ICT use. Other studies by Sadaf, Newby and Ertmer (2012) and Sanmamed, Sangra and Carril (2017) revealed positive attitudes toward the ICT use in teaching, as well.

One of the items with the highest mean scores (M=4.75) was the first item emphasizing the use of ICT in terms of teaching goals. Teachers have positive attitudes considering ICT use in their teaching process to get the aimed results in their teaching. This means that they regard ICT as useful and productive for their professional teaching.

Similarly, nearly half of the teachers in the current study reported that they integrate technology in language teaching mostly in a supportive or in a supplementary way such as for presenting PowerPoint slides, for facilitating instruction or as for finding interesting and motivating exercises. It seems that EFL teachers are aware of the necessity of ICT use in their teaching to maximize learning.

Another item with one of the highest mean scores (M=4.52) was the fourth as it was stressed that lessons with ICT use could be much more interesting than the teaching with the traditional methods. The classroom practices of the EFL instructors participating in the study were similar to the findings of Özel and Arıkan (2015) who observed 112 EFL instructors from various universities in their study. The results of their study reflected that teachers perceive technology as a tool for teaching and showed a positive attitude towards the use of it in language teaching. This high score results suggest that being convinced of the benefits of using ICT in teaching contributed in a great way to the positive attitudes of instructors. However, while the quantitative data supported the idea of interesting lessons thanks to ICT use, the qualitative data revealed recurrent use of the same ICT material again and again over a time, students may lose their interest in the lesson.

The tenth (M=4.70) and the nineteenth (M=4.40) items were closely related to each other, both supporting the idea of using audio-visual materials in their teaching. If teachers want to use more authentic audio-visual materials in their teaching, they will need more help from ICT based materials.

The last item with one of the highest score was thirty-second (M=4.40) which supported that ICT use increases the motivation in the class. The motivation was discussed as one of the advantages of ICT use in the class in previous studies (Barron, Orwig, Ivers & Lilavois, 2001; İnan & Lowther, 2010). The data which is related to motivation, gathered from the questionnaire was supported by the qualitative data. The participants stated that motivation is a key factor to use ICT more in classes as it enables teachers to use various materials in the class and they can avoid becoming boring teachers. The digital generation is more familiar with ICT, and audio-visual materials contribute a lot to keep students' interests more. However, some participants in the interview pointed out the fact that after some time,

students can get distracted easily, so it was suggested that teachers should avoid using the same ICT material again and again.

To sum up, teachers regarded ICT as a powerful tool and compared to traditional methods, ICT can support their teaching with its opportunities to provide audio-visual materials as well as increasing motivation. Accordingly, it can be seen that instructors at Uludağ University have positive attitudes towards ICT use and are aware of its benefits.

5.2.2 Discussion related to the findings of research question two. The second research question inquired about the variables such as age, gender, teaching experience, computer skills and how they affect EFL instructors' attitudes toward ICT.

The effect of age on attitudes towards ICT by EFL instructors

The age of the participants was taken as an effective factor, which may affect the use of ICT and their attitudes. As a result, the statistical results of the quantitative data were analyzed with the help of a one-way ANOVA test. There was a statistically significant difference in terms of the age factor. The most significant results were obtained between the ages of 20-30 and 30-40 groups. Participants aged between 20 and 30 had positive attitudes, and they are respectively followed by 30 and 40 year-old group, 40 and 50 year-old group and the participants who were 50 and above age group. The younger generation participants were born into the technological era, and they are aware of the need for enhancing ICT skills. These results support the idea of Prensky (2001) who claimed that today's students are "native speakers of the digital language of computers, video games and Internet" (p.1). The gap between the specific age groups can be a good and supportive example of his claim. In some ways, the exposure of younger generation to technology is greater than the elder teachers who can be defined as digital immigrants. They became acquainted with the technology in their late thirties. Previously, Rahimi and Yadollahi (2011) pointed out that the computer use is mostly age-dependent; younger users are the most frequent users of ICT. As a

result, it could be concluded that age is a significant factor when we talk about the rapidly evolving online world around us. Since the digital nativity concept plays a big role in this context, the younger generation can be considered as more competent users of ICT.

The effect of gender on the use on attitudes towards ICT by EFL instructors

The effect of gender on attitudes towards ICT use was analyzed with conducting independent-samples t-tests. The statistical data revealed that the data was distributed homogeneously, and independent-samples t-tests didn't yield any statistically significant results for gender. Most of the participants were female (n=53) whereas there were only (n=10) male participants. As a result, we cannot generalize the findings to the entire adult population. This is a limitation of the study; as a result of this, the findings should be interpreted carefully.

In a study including Finnish teachers' ICT use, Ilomaki (2011) found that ICT is gender neutral as the male population had represented technical concept of ICT for years, whereas, female population mostly represented the communicative concept of ICT such as writing or sending e-mails. The both sides equalize each other.

Considering many professionals, teachers are in a group that is highly specialized in ICT due to the fact that their educational background level and their exposure to ICT training have an invaluable contribution in terms of ICT (Nurmela & Ylitalo, 2003; van Rijk & Hacker, 2003). Comparing the gender difference here between males and females, it can be easily said that they have the same status regarding ICT skills and usage.

In the current study, the data showed us that gender difference plays no role in teachers' attitudes and the use of ICT. Correlated with other variables such as teachers' working experience, computer skills and attitudes, the fact that gender was not an effective factor which has an impact on technology was also pointed out in other studies as well (Rahimi & Yadollahi, 2011; Tezci, 2010).

The effect of working experience on attitudes towards ICT by EFL instructors

The effect of working experience of the EFL instructors was taken as a factor to see if their attitudes were affected by their teaching experience or not. Working experiences of the participants were categorized into three main groups as followed: 1-5 years of experience, 6-10 years of experience, and 11 years of experience and above. According to the statistical data, there was a significant difference regarding working experience. Specifically, the 1-5 years of experience group significantly differed from that with 6-10 years of experience and 11+ years of experience group. Taken together, these results suggest that the less working experience do have an effect on the attitude. Specifically, the group which have 1-5 years of experience possess positive attitudes towards ICT more than the other two groups of working experience. In the interview data, the younger teachers stated that they had taken technology classes during their undergraduate education. The switch to modern technology affected the modern curriculum of teacher education programs. This might be one specific reason of the main gap between the groups.

It was also stated by experienced teachers that they are used to teach with traditional methods; as a result of this, they do not feel confident about their ICT skills due to unexpected technological breakdowns. However, in the interview they said that they would prefer using ready made ICT materials to increase motivation in their class. Unlike the current study, the results from Solmaz (2011) stated that working experience was not a significant factor and it had no effect on teachers' ICT use. The older the teachers were, the more their internet use was. Experienced teachers still preferred using ICT no matter what their working experience is.

Further analyses revealed that the group which have 1-5 years of experience have more positive attitudes towards ICT. Negative correlations between years of teaching experience and teacher attitudes were observed, reiterating the results of previous studies by

Jimoyiannis and Komis (2007). From the interview data, it can be understood that it is probably because they had less experience with those newly emerged and radically changing technologies. It is also possible that experienced teachers are more likely to advocate traditional teaching strategies which consequently support the results of the mismatch between technology integration and teaching experience.

5.2.3 Discussion related to the findings of research question three. The third research question inquired whether there is a relation between computer skills and attitude. Only twenty-four teachers reported that they are the users with high computer competence level and similarly there are twenty-three participants who use computers more than 15 hours a week. There was a positive correlation between the two variables. Increases in attitudes towards ICT were correlated with increases in ICT use and needs. In the studies by Scrimshaw (2004), Pamuk and Peker (2009), and Brodbar (2010), it was stressed that having sufficient computer competence is a key factor for the teaching practices with ICT. It can also be concluded that lack of computer competence discouraged teachers from integrating computers in teaching. The more the computer competence level is, the higher their attitudes are. The main reason for anxiety and lack of confidence is the fact that teachers feel themselves lack of technology knowledge and skills. As a result, teachers do not feel comfortable with ICT (Finley & Hartman, 2004). Also, from the interview results, the qualitative data shows us the fact that when teachers regard themselves as proficient computer users, they feel more confident and come up with new ideas about the integration of ICT tools.

Besides, again from the same qualitative data it can be revealed that though they are lack of some of the computer skills, they are still willing to learn more about ICT and have positive attitudes towards ICT use in their teaching. These digital immigrant teachers are open to new up-to-date teacher training courses.

Based on the results, this study showed that EFL instructors need training programs with the support of school administration. The findings of descriptive and quantitative study by Cahyani and Cahyono (2012) support our inferences. In Indonesian concept, the findings revealed that the types of technology used by teachers are limited to, starting with the highest rank, computers, multimedia and websites. However, they need special training to become effective users since they have positive attitudes towards technology use in the classroom. The results obtained from the study make it possible to infer that EFL instructors know the value of advantages of technology integration in their teaching; however, they have some considerations in regard to training issues. Though, it was verified that more than half of the teachers support the view that technology has the power to maximize learning and to increase student motivation when integrated in teaching, the fact that teachers' concern on lack of time and limited resources to integrate cannot be underestimated. It is evident from the results of the current study that instructors are willing to use audiovisual ICT tools such as i-tools provided by the coursebook publishings, CDs or audio tapes more often than they use computers in their teaching. The huge difference in effective use of ICT supported by the qualitative data probably stems from either lack of experience and training or lack of internet access in classrooms.

5.2.4 Discussion related to the findings of research question four. The fourth research question inquired about what technological tools participants use for personal development. The further statistical analysis from the quantitative data showed us that the technological tools participants use for personal development can be grouped into eleven different parts although the specific names of the tools were given by the researcher in the multiple choice format. The multiple choice options are Dictionaries, Newspapers, Magazines, Blogs, whereas, for the other options the participants mentioned Online Journals, Internet, Articles, Books, Websites, Movies & Songs, Conferences.

In this current study, it can be easily seen that the participants mostly use dictionaries, which is followed by newspapers and magazines when they are asked about their professional development tools. Both online and paper dictionaries are becoming more popular nowadays since the accessibility level has been raised by technological developments.

The third mostly used professional development tool is the Internet although the participants have no Internet access in their classrooms. No Internet access answers are provided by the last open-ended question in the questionnaire focused on the expectations of EFL instructors from the administration in order to use ICT more efficiently. In the interview data, the idea of using internet is supported positively considering the time the participants spend on their personal devices. It is found that participants prefer searching online teaching materials and at the same time, ready-made materials are preferred more by the instructors who have lower computer competence skills.

Our findings are similar to the observations made by Hayes (2007) who emphasized the need for well maintained access to information and communication technologies and the need for technical support in schools. Neyland (2011) also highlighted the importance of the same type of support from administrators and colleagues for the persuasion of ICT integration. It can be proposed, based on the findings of the current study and previous studies, that if schools adopt an innovative structural strategy which is shared by all the staff, teachers' attitudes would increase, which in turn would foster ICT integration.

5.2.5 Discussion related to the findings of research question five. The fifth research question inquired about what the expectations of EFL instructors are at UUS of FL from the administration through the analyses of qualitative and quantitative data. This research question takes place both in the last section of the questionnaire part and interview questions part. Twenty of the participants answered this question in the written part and twelve of the participants contributed to the study by answering this question in the interview part. The

analyses of the data demonstrated that most EFL instructors are expecting more ICT support from the administration on the basis of equipping all classrooms at the school of foreign languages with proper Internet connection. Therefore, they will have access to online teaching materials, websites and supporting visuals via the net. In that way, it is believed that they can encourage their students more about the ICT use outside the classroom. Fiktorius (2013) explained that nearly all students are willing to use ICT extensively in their own learning with the help of their teachers' instructions. According to Fiktorius' study, websites, which were advised by their teachers, were visited on a regular basis by students and they were found to be useful and interesting.

Secondly, Tondeur, van Keer, van Braak and Valcke (2007) focused on the influence of school policy on ICT integration. They found that policies of schools such as ICT support, training and planning had significant effect on the use of ICT in classroom practice. They also stated that successful integration occurred only if teachers possessed and adopted the values stated in the school policy. Furthermore, Stuart, Mills and Remus (2009) investigated the effect of school leaders on the implementation of new technologies in New Zealand. They found that school leaders who were competent in ICT technologies, ICT management and ICT technologies tended to advocate ICT in their schools more strongly than those who had limited knowledge and experience.

5.2.6 Discussion related to the findings of research question six. The sixth research question was seeking answers considering EFL instructors' ICT needs and the findings from the questionnaire and interview data revealed that EFL instructors' primary need was ICT training. All twelve participants in the interview stated that they would like to have professional ICT training with the support of school administration. In a study by Chen (2008), it was found that teacher training is the most crucial factor considering all variables. These variables included teacher training, beliefs, attitudes, the constructivist thinking,

institutional support, perceived capability, classroom pedagogy, and Internet use. In order to have successful technology implementation, ICT training is a must for professional development programs in this era. It was also emphasized by Akayoğlu and Yeşilbursa (2016) that technology training for teachers must be priority in teacher education programs for pre-service teachers and also for in-service teachers. Effective technology integration involves not only technnology equipments but also specially designed training programs for educators.

Their secondary needs can be stated as proper internet connection for all classrooms at school of Foreign Languages so that they can reach to online teaching materials and also they want to have personal PC in their offices to use internet technologies more effectively.

5.2.7 Discussion related to the findings of research question seven. The seventh research question inquired about for what purposes the instructors use ICT. The second questionnaire was conducted to collect information about the participants' ICT use. The analyses of the data showed that the participants use ICT for their personal purposes and personal development comparing to their professional purposes. The items with highest mean scores showed us that they use ICT most when it comes to online dictionaries so as to search for the word definition or pronunciation of the words. The Internet use for personal purposes was supported by the interview data as all twelve participants asserted that they use the Internet in their mobile phones to check their social media accounts everyday. However, in the interview data, eight participants out of twelve stated that they tried to use the Internet in their teaching when they had a chance. All in all, it can be seen that instructors use ICT more for personal purposes than professional purposes.

5.3 Conclusion

The aim of this study is to provide administrators and teachers with the information about instructors' ICT attitudes, needs and purposes of their use. For that reason, ICT use of EFL instructors working at Uludağ University School of Foreign Languages and their

attitudes towards ICT were investigated. The research instruments used in the study are both qualitative and quantitative data collection tools which include interviews for qualitative part and two questionnaires for quantitative part. The study was carried out at Uludağ University School of Foreign Languages with the written permission from the Rectorate of Uludağ University. The data was collected at the beginning of 2015-2016 spring semester.

Findings in this study suggest that nearly all participants regarded ICT as an invaluable tool for their teaching and have moderately positive attitudes towards using it for personal and professional reasons. More than half of the instructors reported themselves as capable enough to use ICT whereas the other seven participants reported themselves with low computer competence levels. There are some significant factors such as age, teaching experience and computer skills which are the most determinant factors affecting ICT use of instructors. However, gender can be considered as not effective at all since there were no significant results related to it. The school enivronment was regarded as sufficient by many instructors, but they also added that they really need Internet access in their classrooms to use ICT more effectively and to motivate students more. Because of the fact that they believe ICT has more advantages than disadvantages for both teachers and students, EFL instructors are willing to use ICT in their teaching. The frequency of their ICT use for personal use is higher than their professional use; nevertheless, they reported that their computer skills are not good enough. As a result, they demand proper in-service ICT training from the administration of School of Foreign Languages because only a few of them attended a short-term workshop or training about ICT. They all agreed that they need this training in order to use ICT more effectively in their teaching. They are willing to develop their ICT skills. This finding can be considered as useful for professional development unit at Uludağ University School of Foreign Languages as they want to design training programs according to instructors' needs.

The factors such as age, teaching experience and computer skills were found to be effective in terms of the participants' ICT use in their teaching. The older they get, the less competent they feel in terms of ICT skills. Teaching experience has the same correlation with age results. On the other hand, gender has no significant effect regarding ICT use though the female population is five times more than the male population.

In terms of factors motivating EFL instructors to use ICT in their teaching, it was revealed that motivation is a key factor as ICT supports teachers with its audio-visual and ready-made materials and makes teaching easier for them with its advantages. There are many advantages of ICT in terms of variety of resources, easiness of reaching information, no time limitation for the use and visualization of the materials, and as a result of all these, it enhances motivation. Moreover, it requires less paperwork and caters different learning needs, so students are actively involved in the learning process.

In terms of factors preventing EFL instructors from using ICT, technical problems and classroom management were revealed from the analyzed data. However, instructors do not think that ICT is a threat for their teaching; on the contrary it is believed to be definitely an advantage. Furthermore, they added that ICT can be a distractor unless it is planned carefully, but when used effectively, ICT could solve some problems such as engaging more students in and making lessons more enjoyable. In-service training can be a great remedy for minimizing the factors preventing EFL instructors from using ICT.

In summary, it can be seen that the main areas the instructors want to be supported are ICT training for more effective use, internet access for classrooms and technical support from the administration. The instructors are ready for the change to modern teaching methods with technology and they have positive attitudes towards embracing it.

5.4 Pedagogical Implications

This study investigated the ICT use of EFL instructors working at Uludağ University School of Foreign Languages, their expectations from the school administration in terms of ICT, and their attitudes towards it as well as how the variables such as age, gender, teaching experience and computer skills affect it. The results of the present research indicate some pedagogical implications for English Language teachers, authorities in the field, policy makers and material developers.

To begin with, the results showed that effective ICT use is correlated with professional ICT training background. These findings suggest that basic ICT training such as using smartboards and online materials should take its place during undergraduate studies. This can be noteworthy for the Council of Higher Education to design the curriculum of pre-service teacher programs and make ICT one of the compulsory classes in foreign language teaching departments as well as for Ministry of National Education for designing in-service programs. The ICT opportunities in teacher education will bring modern standards because of the new learning skills which newly graduated students should possess in addition to traditional ones. As *The Partnership for 21st Century Skills* asserted 4 Cs—"super skills" for the 21st century: Creativity, Communication, Critical Thinking and Collaboration, the ICT opportunities will bring a real variety of good teaching examples in English language teaching comparing to traditional teaching methods in order to foster those "super skills".

Secondly, teachers need to have special training to use ICT more effectively and maximize the potentials of using it. In order to reach that proficient competence level, offering good quality of ICT examples and training according to modern standards can be a solution for this problem, and this will minimize the lack of technical and pedagogical support needed from the administration. Then they will become more proficient users of ICT professionally. Based on that, the publishing companies of ELT coursebooks in collaboration

with professional development unit of the schools should organize short term workshops by inviting experts of ICT as a speaker during the academic semesters.

Last implication is for school administrations who must be aware of the need for ICT-based material development for language teaching. The instructors believed that ICT makes their life easier though they have limited resources in their classrooms such as supplementary i-tools of the books without proper Internet connection. There is an urgent need to promote new learning materials supported by modern technologies as there is a switch from traditional teaching methods to more up-to-date materials.

5.5 Suggestions for Further Research

This study investigated 63 EFL instructors working at Uludağ University School of Foreign Languages, in Bursa, Turkey. A similar study can be carried out throughout Turkey in order to see the general ICT use of English teachers from different universities.

A further study may also be repeated with pre-service teachers as they are digital natives and have the possibility of getting ICT training beforehand, their attitudes towards ICT use can be more crucial. This is important in terms of specifying their ICT needs and organizing the curriculum of undergradute studies.

Since the lack of ICT training was one of the main issues regarding ICT use of EFL instructors in this current study, another research can be conducted with effective ICT training to compare the outcomes and measure the quality of ICT training in modern era.

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Appendices

Appendix 1

QUESTIONNAIRE – ENGLISH VERSION

This questionnaire aims to determine to what extent EFL Instructors working at Uludağ University, School of Foreign Languages benefit from the Internet for their personal and professional development. You are asked to read the questions carefully and choose the option that fits you most while filling in the questionnaire. There is no need to write your name. Considering the questionnaire is being conducted for a scientific research, your sincere replies to all of the questions will contribute to my study in a great way. I thank you for your participation.

Instructor Özge ÖZTÜRK
Uludağ University
School of Foreign Languages

Thesis Supervisor: Asst. Prof. Dr. Esim GÜRSOY
Uludağ University. Faculty of Education
Department of English Language Teaching

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1. Gender : **a)** Female **b)** Male

2. Age : **a)** 20-30 **b)** 30-40 **c)** 40-50 **d)** 50 and over

3. Department of Graduation:
a) English Language Teaching **c)** Translation
b) Literature **d)** Linguistics / Philology

4. Working experience: ……. (years) **a)** 1-5 **b)** 6-10 **c)** 11+

5. Do you have the opportunity to use a computer with internet access at your school?
a) Yes **b)** No

6. Do you have a computer with internet access which you can use at home all the time?

a) Yes **b)** No

7. Are you a member of any of social networking websites? (e.g. Facebook, Twitter)

a) Yes **b)** No

8. Where do you usually use the Internet?
a) Home **b)** School

9. How many hours do you use computer in a week?

a) less than 5 hours **b)** 5- 9 hrs **c)** 10-14 hrs **d)** 15-19 hrs **e)** more than 20 hours

10. How do you consider your current computer competency level?

a) Low **b)** Medium **c)** High

11. Which ones below do you use for your **Professional Development**?

a) Blog **b)** Dictionary **c)** Newspaper **d)** Magazine **e)** Other (Please specify ……..)

Please degree the given items from 1 to 5.

1- Strongly Disagree. 5- Strongly Agree.

1.	**I watch movies in English online.**	**1)**	**2)**	**3)**	**4)**	**5)**
2.	I download / listen to music in English online.	1)	2)	3)	4)	5)
3.	**I read newspaper and magazines in English online.**	**1)**	**2)**	**3)**	**4)**	**5)**
4.	I read web pages which are written in English.	1)	2)	3)	4)	5)
5.	**I search for the meaning of the English words that I don't know online**	**1)**	**2)**	**3)**	**4)**	**5)**
6.	I am scared of using the Internet.	1)	2)	3)	4)	5)
7.	**There are some dictionaries that I always use online.**	**1)**	**2)**	**3)**	**4)**	**5)**
8.	I search for the pronunciation of English words online.	1)	2)	3)	4)	5)
9.	**I use the translation programs online.**	**1)**	**2)**	**3)**	**4)**	**5)**
10.	I benefit from the Internet in order to increase my English vocabulary knowledge.	1)	2)	3)	4)	5)
11.	**I benefit from the Internet in order to improve my English speaking skills.**	**1)**	**2)**	**3)**	**4)**	**5)**

12. I benefit from the Internet in order to improve my English listening skills.	1)	2)	3)	4)	5)
13. I search for the English grammar rules online.	**1)**	**2)**	**3)**	**4)**	**5)**
14. I use English to communicate via e-mails.	1)	2)	3)	4)	5)
15. I believe that Internet is useless.	**1)**	**2)**	**3)**	**4)**	**5)**
16. I read scientific articles in my field online.	1)	2)	3)	4)	5)
17. There are scientific journals in my field that I always follow online.	**1)**	**2)**	**3)**	**4)**	**5)**
18. I chat on Skype with the support of earphone and microphone online.	1)	2)	3)	4)	5)
19. I communicate with people whose native language is English by means of online writing.	**1)**	**2)**	**3)**	**4)**	**5)**
20. I own a website (or blog) with Turkish content.	1)	2)	3)	4)	5)
21. I own a website (or blog) that I prepared in English.	**1)**	**2)**	**3)**	**4)**	**5)**
22. I am a member of some websites that are related to English Language teaching.	1)	2)	3)	4)	5)
23. I can find more resources related to ELT on the Internet.	**1)**	**2)**	**3)**	**4)**	**5)**
24. It is hard for me to reach the information I am searching online.	1)	2)	3)	4)	5)
25. Internet is an inextricable part of my language teaching.	**1)**	**2)**	**3)**	**4)**	**5)**
26. I use social networking websites (like Facebook) for my professional development as well.	1)	2)	3)	4)	5)
27. Using the Internet helps me improve my teaching skills.	**1)**	**2)**	**3)**	**4)**	**5)**
28. I find it boring to use computer and Internet in my lessons.	1)	2)	3)	4)	5)
29. I exchange opinions with other teachers of English online.	**1)**	**2)**	**3)**	**4)**	**5)**
30. I download lesson related songs from the net and use them in the classroom.	1)	2)	3)	4)	5)
31. I use audios or videos that I downloaded from the net in the class.	**1)**	**2)**	**3)**	**4)**	**5)**
32. I find visual materials from the net and use them in the classrroom.	1)	2)	3)	4)	5)
33. I search for exercises on the net and use them in the classroom.	**1)**	**2)**	**3)**	**4)**	**5)**
34. I use online exercises of coursebooks in the lesson.	1)	2)	3)	4)	5)

35. I encourage my students to improve their language skills by using the Internet.	**1)**	**2)**	**3)**	**4)**	**5)**
36. I share the lesson materials that I prepared via the net with my colleagues.	1)	2)	3)	4)	5)

- Do you have any expectations from Uludağ University School of Foreign Languages in order to use the ICT more efficiently? What are they, if there are any?

Appendix 2

Bilgi ve İletişim Teknolojileri (BİT)'e Yönelik Tutum Ölçeği	5	4	3	2	1
1. Bilgi ve İletişim Teknolojileri(BİT) kullanımını, öğretim programlarının amacına ulaşması açısından yararlı görüyorum.					
2. BİT'in derste kullanımı fazladan iş yükü getiriyor.					
3. BİT'in derste kullanımının öğretmen başarısını artıracağını düşünüyorum.					
4. BİT ile gerçekleşen derslerin öğrencilerin ilgisini çekeceğine inanıyorum.					
5. BİT eğitim araç ve gereçlerinin pahalı olduğunu düşünüyorum.					
6. BİT'in eğitimde kullanımı ülkemiz için lükstür.					
7. BİT'in derste kullanımının zor olduğunu düşünüyorum.					
8. BİT araç ve gereçlerinin derste kullanılmasının zaman kaybına neden olacağını düşünüyorum.					
9. BİT desteğinin öğrenmeyi kolaylaştırdığına inanıyorum.					
10. Derslerimde görsel-işitsel araçları kullanmayı istiyorum.					
11. BİT'in derste kullanımının öğrencilerin başarısını artıracağını düşünüyorum.					
12. BİT'in kullanımı ile öğrencilerin derse aktif olarak katılacağını düşünüyorum.					
13. BİT'in eğitim bilimine önemli katkılar sağlayacağını düşünüyorum.					
14. Öğrencilerimizin bilgisayar destekli eğitim görmeleri idealimdir.					
15. Ülkemiz için BİT uygun değildir.					
16. BİT'in eğitim ve öğretimin kalitesini arttırdığına inanıyorum.					
17. BİT'in öğretmene bir rakip oluşturduğunu düşünüyorum.					
18. BİT kullanılmasının öğrenciyi pasifleştirdiğini düşünüyorum.					
19. Görsel-İşitsel araçların öğrenmede kalıcılığı artırdığına inanıyorum.					

20. Kalabalık sınıflarda BİT'ten yararlanmanın zor olduğunu düşünüyorum.					
21. Eğitim sistemimizin en büyük sorunlarından birisinin de BİT'in etkin bir şekilde kullanılmaması olduğunu düşünüyorum.					
22. Bütün öğretmenlerin BİT konusunda sürekli bilgilendirilmesi gerektiğini düşünüyorum.					
23. BİT'in uygulama alanlarını tanımaya gerek duymuyorum.					
24. Öğretimin özel hedeflerinin gerçekleştirilmesinde, BİT'in kullanılmasının gerekli olmadığına inanıyorum.					
25. BİT ile ilgili eğitim araç ve gereçleri derslerimde kullanmayı seviyorum.					
26. BİT'in imkanlarına yer verildiğinde derslerin daha verimli olacağına inanıyorum.					
27. BİT'in her çeşit ders için gerekli olmadığına inanıyorum					

28. Öğretmenliğe başladığımdan bu yana, BİT **kullanmamamın** eksikliğini hissediyorum.					
29. BİT yardımı ile ders işlemek benim için büyük zevktir.					
30. BİT'in öğretmenler için güven ve cesaret kaynağı olduğunu düşünüyorum.					
31. BİT'in öğretmenlerin yaratıcılığını sınırlandırdığını düşünüyorum					
32. BİT'in derste motivasyonu yükselttiğine inanıyorum.					
33. BİT'in araç ve gereçlerini kullanmanın bilgi ve beceri gerektirdiğine inanıyorum.					
34. Öğretimin daha etkili olması için BİT uygulamalarının gerekli olduğuna inanıyorum.					
35. BİT kullanılmasının öğretmenin sorumluluğunu arttırdığını düşünüyorum.					
36. İyi bir öğretmen olabilmenin koşullarından birinin de BİT'i etkin bir şekilde kullanmak olduğunu düşünüyorum.					
37. BİT'in öğrencilerin yaratıcılığını sınırlandırdığını düşünüyorum.					
38. BİT kullanılırken öğretmenin sınıfta otoriter rol alması gerektiğine inanıyorum.					

Appendix 3

Interview Questions

1-How often do you use ICT ,computers and Internet? Which devices do you use? Please specify…

2-Have you ever had any educational training to use ICT more effectively?

3-Do you think that you need a training course in oder to use ICT more effectively? Why/why not?

4-Do you think that your ICT level of competence affect your ICT use in the classroom?

5-. Considering the wide spread and frequent use of ICT among the young generation, would you consider ICT skills and its integration in language classes as necessary? Why/Why not?

6- Can you list the advantages and disadvandages of ICT use for learners?

7-Can you list the advantages and disadvantages of ICT use for teachers?

8- does ICT use increase motivation in your class? Wh/why not? (which aspects of it increase motivation?)

9- Do you think that ICT use in your teaching is a threat or advantage for your teaching? Why?

10- Is typical Turkish classroom suitable for teaching with ICT?

11- Are you willing to use ICT in your classes?

12- How often do you use them in your teaching?

13-What are your expectations from the administration of Uludag University school of foreign languages?

Appendix 4

Descriptive Statistics for the Attitude Questionnaire

**Reverse items*

(n=63)	Mean	Standard deviation
1. I find Information and Communication Technologies (ICT) use useful regarding reaching goals of academic programs.	4.75	0.43
2. ICT use in the class causes extra work.*	2.86	1.21
3. I think that ICT use in the class increases teacher's success.	4.30	0.73
4. I believe that lessons with ICT draw students' attention.	4.52	0.84
5. I think ICT instruments are expensive.*	3.51	1.25
6. ICT use in education is luxury for our country.*	2.48	0.96
7. I find it difficult to use ICT in the class.*	2.59	0.85
8. I find it time consuming to use ICT instruments in the class.*	2.14	0.82
9. I believe that ICT support makes learning easier.	4.37	0.72
10. I want to use audio-visual materials in my classes.	4.70	0.46
11. I think ICT use in the lesson increases students' success.	4.43	0.83
12. I think that thanks to ICT use, students will join the lesson in an active way.	3.83	1.30
13. I think that ICT will contribute a lot to educational science.	4.16	0.98
14. It is my dream that our students have computer assisted education.	4.11	0.93
15. ICT is not suitable for our country.*	2.16	0.84
16. I believe that ICT increases the quality of education.	4.22	0.94
17. I think that ICT becomes a rival for a teacher.*	2.14	0.75

18. I think that ICT use makes students passive.*	2.32	0.85
19. I believe that ausio visual materials increase the long-term learning.	4.40	0.70
20. I find it difficult to use ICT in crowded classes.*	2.94	1.29
21. I think that one of the biggest problems of our education system is the ineffective use of ICT.	3.56	1.30
22. I think all teachers should always be informed about ICT.	4.33	0.84
23. I do not need to know about ICT application field.*	2.10	0.81
24. I believe that it is not necessary to use ICT to reach the special learning goals.*	2.30	0.96
25. I like using ICT instruments in my classes.	4.25	0.91
26. I believe that classes will be more productive with ICT opportunities.	4.30	0.81
27. I believe that ICT is not necessary for all types of classes.*	2.65	1.16
28. I have felt the lack of not using ICT since I started teaching.	3.08	1.11
29. It is my great pleasure to have class with ICT support.	4.17	0.90
30. I think that ICT is a source of confidence and courage for teachers.	3.52	1.36
31. I think that ICT limits teachers' creativity.*	2.35	0.88
32. I believe that ICT increases motivation in the class.	4.40	0.81
33. I believe that the use of ICT instruments requires some skills.*	3.95	0.85
34. I believe that ICT applications are necessary for more effective education.	4.25	0.95
35. I think that ICT use increases teacher's responsibility.*	3.44	1.31
36. I think that one of the prerequisites of being a good teacher is	3.68	1.16

the effective use of ICT.		
37. I think that ICT limits students' creativity.*	2.41	1.04
38. I believe that teacher must be dominant in the class while ICT is being used.*	2.71	1.25

Appendix 5

Descriptive Statistics for the ICT Use and Needs Questionnaire

**Reverse items*

(n=63)	Mean	Standard deviation
1. I watch movies in English online.	4.06	1.16
2. I download / listen to music in English online.	3.95	1.32
3. I read newspaper and magazines in English online.	4.02	1.07
4. I read web pages which are written in English.	4.35	0.82
5. I search for the meaning of the English words that I don't know online	4.71	0.70
6. I am scared of using the Internet. *	1.35	0.97
7. There are some dictionaries that I always use online.	4.70	0.68
8. I search for the pronunciation of English words online.	4.44	0.91
9. I use the translation programs online.	2.30	1.43
10. I benefit from the Internet in order to increase my English vocabulary knowledge.	4.29	0.90
11. I benefit from the Internet in order to improve my English speaking skills.	3.67	1.21
12. I benefit from the Internet in order to improve my English listening skills.	4.03	1.10
13. I search for the English grammar rules online.	3.35	1.38
14. I use English to communicate via e-mails.	3.78	1.17
15. I believe that Internet is useless.*	1.06	0.24
16. I read scientific articles in my field online.	3.92	1.19
17. There are scientific journals in my field that I always follow online.	3.30	1.39
18. I chat on Skype with the support of earphone and microphone online.	2.73	1.59

19. I communicate with people whose native language is English by means of online writing.	2.84	1.42
20. I own a website (or blog) with Turkish content.	1.29	0.90
21. I own a website (or blog) that I prepared in English.	1.41	1.08
22. I am a member of some websites that are related to English Language teaching.	3.35	1.47
23. I can find more resources related to ELT on the Internet.	4.40	0.89
24. It is hard for me to reach the information I am searching online.*	1.57	0.85
25. Internet is an inextricable part of my language teaching.	3.54	1.18
26. I use social networking websites (like Facebook) for my professional development as well.	2.87	1.55
27. Using the Internet helps me improve my teaching skills.	3.90	1.02
28. I find it boring to use computer and Internet in my lessons.*	1.38	0.81
29. I exchange opinions with other teachers of English online.	2.89	1.27
30. I download lesson related songs from the net and use them in the classroom.	3.67	1.17
31. I use audios or videos that I downloaded from the net in the class.	3.95	1.09
32. I find visual materials from the net and use them in the classroom.	4.02	1.08
33. I search for exercises on the net and use them in the classroom.	4.05	0.92
34. I use online exercises of coursebooks in the lesson.	3.08	1.19
35. I encourage my students to improve their language skills by using the Internet.	4.46	0.75
36. I share the lesson materials that I prepared via the net with my colleagues.	3.25	1.27

Özgeçmiş

Adı Soyadı : Özge ÖZTÜRK

Doğum Yeri ve Yılı: Balıkesir -1986

Yabancı Dili : İngilizce

Eğitim Durumu (Kurum ve Yıl)

Lise : Turhan Tayan Anadolu Lisesi (2004)

Lisans : Uludağ Üniversitesi (2008)

Yüksek Lisans : Uludağ Üniversitesi (2017)

Çalıştığı Kurum/Kurumlar ve Yıl : Uludağ Üniversitesi Yabancı Diller Yüksekokulu 2008-

ULUTÖMER - Uludağ Üniversitesi Türkçe Öğetim Merkezi (2013-2016)

Yayınları (SCI ve diğer) :

Öztürk, Ö. (2012). "Wonders of World Wide Web", (Poster Bildiri), Yıldız Teknik Üniversitesi ELT konferansı, İstanbul/Türkiye.

Öztürk, Ö., Çetinkaya Ç. (2012). "Touchy-Teachy-Techy Vocabulary Teaching", TESOL France Conference, Paris/ Fransa.

Öztürk, Ö. (2013). "Discover Contemporary English with real life examples" (Poster Bildiri), Uludağ Üniversitesi AR-GE günleri, Bursa/Türkiye.

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Özge ÖZTÜRK

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ULUDAĞ ÜNİVERSİTESİ

TEZ ÇOĞALTMA VE ELEKTRONİK YAYIMLAMA İZİN FORMU

Yazar Adı Soyadı	Özge ÖZTÜRK
Tez Adı	An investigation of English lecturers' attitudes toward information and communication technologies (ICT) and their use of technology
Enstitü	Eğitim Bilimleri Enstitüsü
Anabilim Dalı	Yabancı Diller Eğitimi Anabilim Dalı
Bilim Dalı	İngiliz Dili Eğitimi
Tez Türü	Yüksek Lisans
Tez Danışman(lar)ı	Doç. Dr. Esim GÜRSOY
Çoğaltma (Fotokopi Çekim) İzni	■ Tezimden fotokopi çekilmesine izin veriyorum ☐ Tezimin sadece içindekiler, özet, kaynakça ve içeriğinin % 10 bölümünün fotokopi çekilmesine izin veriyorum ☐ Tezimden fotokopi çekilmesine izin vermiyorum
Yayımlama İzni	☐ Tezimin elektronik ortamda yayımlanmasına izin veriyorum ■ Tezimin elektronik ortamda yayımlanmasının ertelenmesini istiyorum 1 yıl ☐ 2 yıl ■ 3 yıl ☐ ☐ Tezimin elektronik ortamda yayımlanmasına izin vermiyorum

Hazırlamış olduğum tezimin yukarıda belirttiğim hususlar dikkate alınarak, fikri mülkiyet haklarım saklı kalmak üzere Uludağ Üniversitesi Kütüphane ve Dokümantasyon Daire Başkanlığı tarafından hizmete sunulmasına izin verdiğimi beyan ederim.

Tarih: 17.10.2017

İmza: