EFL TEACHERS' USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN THEIR CLASSROOM PRACTICE: ARTVIN SAMPLE

Batuhan SELVİ

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(Bilgisayar ve İletişim Teknolojilerinin İngilizce Öğretmenleri Tarafından Sınıf İçindeki Kullanımına İlişkin Bir Çalışma Artvin Örneği**)**

YÜKSEK LISANS TEZI

Batuhan SELVİ

Danışman: Assoc. Prof. Dr. Erdinç PARLAK

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Yüksek Lisans Tezi olarak sunduğum "EFL TEACHERS' USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES IN THEIR CLASSROOM PRACTICE: ARTVIN SAMPLE" başlıklı çalışmanın, tarafımdan, bilimsel ahlak ve geleneklere aykırı düşecek bir yardıma başvurmaksızın yazıldığını ve yararlandığım eserlerin kaynakçada gösterilenlerden olduğunu, bunlara atıf yapılarak yararlanılmış olduğunu belirtir ve onurumla doğrularım.

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31.../08/ 2015

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ÖZET

YÜKSEK LİSANS TEZİ

BİLGİSAYAR VE İLETİŞİM TEKNOLOJİLERİNİN İNGİLİZCE ÖĞRETMENLERİ TARAFINDAN KULLANIMINA İLİŞKİN BİR ÇALIŞMA ARTVİN ÖRNEĞİ

Batuhan SELVI

2015, 152 sayfa

Son 20 yıl, Bilgi ve İletişim Teknolojilerinin (BİT) kayda değer yükselişine şahit olmuştur. BİT'in faydalarından yararlanmak amacıyla dünya genelinde ülkeler çeşitli alanlarda BİT'I geliştirmek için önemli yatırımlar yapmaktadırlar. Bu nedenle klasik derslikleri etkileşimli derslikler haline dönüştürme çabaları sarf edilmiş ve derslikler BİT araçlarıyla donatılmıştır. Bununla birlikte, BİT araçlarının etkili kullanımının önemli ölçüde sınıftaki gerçek uygulayıcılar oldukları için öğretmenlere bağlı olduğu görülmektedir. Bu boşluğu doldurmak için bu çalışmada İngilizce öğretmenlerinin sınıf ortamında BİT'I nasıl kullandıkları incelenmiştir. Bu çalışma, BİT ortamını, İngilizce öğretmenlerinin BİT becerilerini, dil sınıflarında var olan BİT kullanımını, İngilizce öğretmenlerini BİT kullanmaya güdüleyen faktörleri, İngilizce öğretmenlerinin BİT kullanmalarını engelleyen etmenleri ve İngilizce öğretmenlerinin destek almak istediği alanları araştırarak İngilizce öğretmenlerinin BİT kullanımlarına ve okullardaki BİT ortamına ilişkin genel bir fotoğraf ortaya koymayı amaçlamaktadır. Bu çalışmada Artvin ve ilçelerinde görev yapmakta olan 103 İngilizce öğretmenine anket uygulanmıştır. Anketten sonra 10 katılımcı ile yarı yapılandırılmış görüşme gerçekleştirilmiştir. Nicel verilerin analizi için SPS17.0 programı kullanılmıştır ve nitel veri içerik çözümleme analizi kullanılarak analiz edilmiştir. Sonuçlar İngilizce öğretmenlerinin BİT'i değerli bir araç olarak gördüklerini ve BİT becerilerini geliştirmek istediklerini göstermektedir. İngilizce öğretmenlerinin bilgisayarı en çok alıştırma, yeni bir bilgi sunma ve uygulamaların sunumu amacıyla sınıf ortamında ve evde kullandıkları bulunmuştur. Ayrıca bilgisayar destekli dil öğretimi bilgisi eksikliği ve BİT'in iletişimsel amaçlar için çok az kullanıldığı tespit edilmiştir. BİT'in eğlence ve güdüleyici özellikleri ile anında dönüt verme ve özgün materyaller sunma olanağı tanıması en güdüleyici etmenler olarak bulunmuştur. Bununla birlikte katılımcılar

teknik destek ve teşvik eksikliğini, bilgisayar ve kaynak eksikliği, sınavların ağır baskısı ve öğrencilerin hazırlıksız oluşunu BİT kullanımlarını en çok etkileyen faktörler olarak tanımlamışlardır. Son olarak katılımcılar daha fazla bilgisayar, internete daha fazla erişim imkanı ve ders ile ilgili daha fazla yazılımın sınıflarda daha sık BİT kullanmalarına katkı sağlayacağını belirtmişlerdir. Ayrıca bütçe eksikliği de araştırma boyunca katılımcılar tarafından vurgulanmıştır.

Anahtar Sözcükler: Bilgisayar ve İletişim Teknolojileri (BİT), İngilizce öğretmenleri, sınıf ortamı, BİT entegrasyonu, Türkiye

ABSTRACT

MASTER'S THESIS

EFL TEACHERS' USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICT) IN THEİR CLASSROOM PRACTICE: ARTVIN SAMPLE

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Last two decades witnessed a significant growth of the Information and Communication Technologies (ICT). In order to harvest the benefits of the ICT, countries all over the world have been making significant investments in developing ICT in various fields. Hence, the attempts to transform traditional classroom into interactive classrooms have been made and classrooms have been equipped with ICT tools throughout the world. However, the effective use of ICT tools seems to be depended largely on teachers as they are the real practitioners in the classroom. In order to fill this gap, EFL teachers' use of ICT in their classroom practice was examined in this study. This study aims provide a general picture of ICT use of EFL teachers and ICT environment in schools by investigating the ICT environment, ICT training and skills of EFL teachers, the current ICT use in language classrooms, the factors motivating EFL teachers to use ICT, the factors preventing EFL teachers from using ICT and the areas EFL teachers would like to get supported. A questionnaire was applied to 103 participating EFL teachers working in Artvin and its towns in the study. Following the questionnaire, semi constructed interview was employed to 10 participants. SPSS 17.0 was used to analyse the quantitative and qualitative data was analysed with content analysis. The results showed that participants regarded ICT as a valuable tool and stated interest in developing their ICT skills. EFL teachers were found to use ICT mostly in classroom and home for drill and practice, explaining new knowledge and presentation of works. Little communicative use of ICT and lack of CALL knowledge were detected among the participants. Fun and motivating features of ICT and opportunities of providing immediate feedback and authentic materials with ICT were found as the most motivating factors. On the other hand the participants described the most preventing factors as lack of technical support and encouragement, lack of computers and resources, heavy pressure of exams and unpreparedness of the

students. Finally participants expressed that more computers, more access to the Internet and more relevant software packages would enable them to use ICT more frequently in their teaching. Lack of budget was also emphasized as a preventing factor by participants throughout the study.

Key Words: Information and Communication Technologies (ICT), EFL teachers, classroom practice, ICT integration, Turkey

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Erzurum, 2015 **Batuhan SELVİ**

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ABBREVIATIONS

CALL	: Computer Assisted Language Learning
CMC	: Computer Mediated Communication
EFL	: English as a Foreign Language
ELT	: English Language Teaching
ICT	: Information and Communication Technologies
IWB	: Interactive whiteboard
MNE	: Ministry of National Education
OECD	: Organisation for Economic Co-Operation and Development
UNESCO	: United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE

1. INTRODUCTION

This study aims to determine how the EFL Teachers in Artvin use Information and Communication Technologies (ICT) in their classrooms. Whether or not they use ICT in their classrooms and what are the reasons and factors affecting their decisions are the main points of the study. In this respect, this chapter covers background to the study, statement of the problem, purpose, significance and limitations of the study. It also involves the definitions of some key concepts addressed in the study.

1.1. Background and Statement of the Problem

With the rapid advancements in technology taking places for two decades, efforts have been made in many countries to promote technology. Especially, developments in Information and Communication Technologies (ICT) have had quite remarkable impact on our lives in general (ICT-Skills Certification in Europe, 2006). ICT have emerged as a profitable way of connecting products, people, information, ideas and communities. Seeing the crucial role of ICT, many countries and institutions around the World emphasized the importance of the ICT and made investment to implement ICT into various fields such as banking, medicine, business and education. Along with the other fields, the attempts to leverage the benefits of ICT were arisen in education. ICT are seen both as a backbone of the modern society and as an essential instrument for inducing educational reforms transforming students into productive knowledge workers (Pelgrum, 2001). According to the UNESCO ICT in Education Programme, integrating ICT into education system can boost the quality of education and exceed the success of education delivery. As ICT have brought new forms in learning and ICT skills have become a must in today's world, governments have instituted educational policies integrating ICT. For example, Australian Federal Government launched Digital Education Revolution in 2008 to provide all secondary school students with laptops. In 2010 U.S.A announced National Education Technology

Plan whose aim is to integrate ICT into educational settings. UNESCO is actively supporting its Member States with resources elaborating ICT in education policies, strategies and activities. ICT is also emphasized in European Union's 2020 strategies such as Horizon 2020 and Digital Agenda for Europe.

To fulfil the expectations of society that demand schools to apply new technologies and to keep pace with rapidly developing field knowledge, classrooms all over the world are being transformed into interactive learning environments by equipping with technological devices such as computers, interactive whiteboards, internet communication, overhead projectors and tablets. Like many other countries, Turkey has been making investment to implement technology into education system. In 2005, the Ministry of Education initiated the project of Bilgisayarlı Eğitime Destek (Supporting Computer-Based Education) with the partnership of Turkish Informatics Industry Association. The main aim of the project was to improve the standards of education by integrating ICT into education and providing one million computers. Information Technology Classes were established to modernise the education system. In 2008, MNE of Turkey provided primary schools with an interactive English Language Learning Software DynED which is now available for high schools. Finally, In 2012 MNE of Turkey launched "Movement of Enhancing Opportunities and Improving Technology", known as FATIH Project, with the aim of providing ICT equipment to classes in order to achieve the ICT supported teaching (MNE of Turkey, 2012). It is predicted that 42.000 schools and 570.000 classes will have been transformed into Interactive Classes equipped with the latest information technologies at the end of this project.

OECD Education and Training Policy report (2005) which is carried out by OECD Education and Training Policy Division and which provides advice on different education and training topics emphasizes that teachers are the major and the most expensive resources of educational institutes and need to have the skills, knowledge and training to handle changes and challenges that may be faced in the future. According to OECD (2005) the most significant factor influencing student learning and achievement is teacher quality and therefore policy development and implementation will be successful only if teachers themselves are actively involved in the process and feel sense of ownership of reform. Teachers are thus expected to use ICT proficiently in

teaching and administration and to be a pioneer in integrating ICT in their teaching process. In this context, teachers play a central role in the efficiency of investment on technology and the success of reforms depends highly on teachers as the practitioners of the reforms.

Language learning is among the fields demanding effective ICT use as using ICT in language classrooms offers numerous solutions to problems that have been faced by language teachers for a long time such as motivating students, enabling students to access authentic sources outside the school, providing opportunities for practice with native speakers and prompting autonomy (Warschauer & Meskill, 2000; Salaberry, 2001; Braul, 2006). Thus, language teachers are expected to use ICT and computer technologies in classroom practice to provide a desirable education. In connection with the investments on ICT integration in Turkey, ELT teachers now have the opportunity to enrich their classroom practice by applying ICT technologies into their practices and as the real practitioners they are expected to learn and perform ICT technologies more frequently.

Accordant with these investments and developments, teachers have become the key of the integration as Smith & Hanson (2000) stated technology in education begins and ends with teacher. ICT and computers will be useless and will remain as merely electronic devices unless teachers use them efficiently in classroom practice. Those who turn these electronic devices into meaningful and beneficial educational materials are teachers.

Briefly, equipping schools with technological devices to facilitate learning and student achievement does not inevitably mean that technological integration is provided (Hennesy, Ruthven, & Brindley, 2005). Teachers are expected to minimise the gap between teaching and learning technologies and are required to use computers and ICT Technologies effectively in their classroom practice instead of the materials they have used in the past to provide opportunities for effective learning environment. Previous studies in Turkey do not provide thorough data in teachers' ICT use in their classroom practice. Hence, this study aims to fill this gap by focusing on the use of ICT by Turkish EFL Teachers in their classroom practice. Besides, this study aims to determine the reasons why EFL teachers in Turkey use or do not use ICT in their classroom practice.

1.2. Purpose of the Study

The main purpose of this study is to examine ICT use of EFL teachers in Artvin and the factors influencing the use of ICT as a teaching aid. The study also aims to determine the existing ICT environment in Artvin, to investigate skills and trainings of these EFL teachers and to reasons for which computers are used via questionnaires and interviews. In general, this study tries to provide a general picture of ICT use in EFL classes in Turkey.

1.3. The Significance of the Study

Using computers in education is one of the key factors to improve the quality of teaching. Using computers as an educational material in language learning and teaching dates back to Computer Assisted Language Learning which flourished in 1960s. While the emergence of using computers is not new in the field, computer is relatively new technology in Turkey as computer has been used for only 10 years. Thus, studies conducted in language learning and teaching are limited in Turkey. Although several topics such as the attitudes of teachers and student-teachers, the impact of ICT on motivation and the relationship between age and use of ICT were addressed, there is limited research on the use of ICT in classroom practice. As the ICT will be useful only if the teachers use the technology efficiently and effectively, it is important to examine teachers' use of ICT and the factors that influence using ICT as a teaching material. Therefore, this study addresses the use of ICT by EFL teachers in Artvin in their classroom practice to fill this gap in the literature. The study is also significant in that there is not much research conducted in Artvin on this issue. Besides, providing a clear picture of ICT use in Artvin, the findings of this study could be used as a baseline for further studies.

1.4. Research Questions

This study tries to give answers for the following questions:

1. What are the existing ICT environment in EFL classes in Artvin?
2. What are the ICT skills of EFL Teachers in Artvin?
3. What training is provided for teachers to integrate ICT into teaching?

4. How do EFL Teachers in Artin use computers in their classroom practice?
5. What are the factors influencing EFL Teachers in Artvin to use computers in their classroom practice?

1.5. Limitations

As this study is limited to EFL Teachers and EFL classes in Artvin, the findings of the study might not be generalised to EFL teachers working in different districts. Therefore, there may be a need for broader studies. The participants' perceptions may be influenced by their current working conditions, knowledge and past experiences. Therefore, the results may not be generalised to all EFL teachers.

Installation of ICT tools within the FATIH Project is still being maintained in schools. For that reason, the results of ICT Environment in Artvin may not be generalised as when the installation is completed the ICT environment in schools will have been improved.

A questionnaire and a semi-constructed interview were used in this study in order to minimise the disadvantages of qualitative and quantitative data collection process. However, triangulation technique could be used to strengthen validity and reliability of the study

1.6. Key Terminology

Information and Communication Technologies (ICT): Information and Communication Technologies can be defined as an umbrella term which includes all kind of communication devices and applications such as hardware, software, computers, networks and satellite systems.

Computer Assisted Language Learning (CALL): Having several definitios the most agreed definition on CALL was made by Levy. According to Levy (1997, p.1) CALL is "the search for and study of applications of the computer in language teaching and learning.

English as a Foreign Language (EFL): The term English as a Foreign Language can be described as the study or the use of English language in countries in which English is not the main medium of communication by non-native speakers.

CHAPTER TWO

2. LITERATURE REVIEW

In this chapter, literature on the related subject is reviewed in 5 parts. Firstly in order to understand the development in technology and the impact of technology on our lives thee need for technology, Information and Communication Technologies will be explained. Then technology in language learning and teaching and Computer Assissted Language Learning will be presented. Finally related studies on this topic will be examined.

2.1. The Need for Technology

Technological advancements, especially the growth of ICT and the advent of internet have led to the emergence of "the knowledge society". Knowledge society is identified as a society with an economy in which knowledge is acquired, created, spread and applied to improve economic and social development and where information is used and exerted in different fields for learning and development (GeSCI, 2011). Evers (2003) describes the characteristics of a knowledge society:

- The members of a knowledge society have achieved a higher standard of education and knowledge workers (researchers, scientists etc.) are employed increasingly in a knowledge society's labour force.
- Products integrated with artificial intelligence comprise its production.
- All of its organisations are transformed into intelligent and learning organisations.
- There is a growing amount of arranged knowledge in the form of digitized skill, stored in organizational plans, data banks, expert systems and other media.
- There are numerous centres of expertise and multi-centric production of knowledge.

- There are noticeable epistemic ideas of knowledge use and knowledge production.

Countries preparing to be transformed into Knowledge Societies are adopting strategies and policies to support their development. Education is seen as a vital part of Knowledge society because education is seen as an engine for socio-economic development, a source of developing basic skills and bases for development of innovation and new knowledge. Individuals are expected to be skilled participants in society and economy in a Knowledge Society. Therefore, education is a critical precondition for being a knowledge society stimulating economic growth, development and wealth. Expanding ICT usage is key to providing development and improving education (UNESCO, 2004).

In this context, education and development are seen as interrelated and ICT is the enabler of both as without ICT it would be difficult for a Knowledge Society to be realized, supported and further developed (GESCI, 2011)

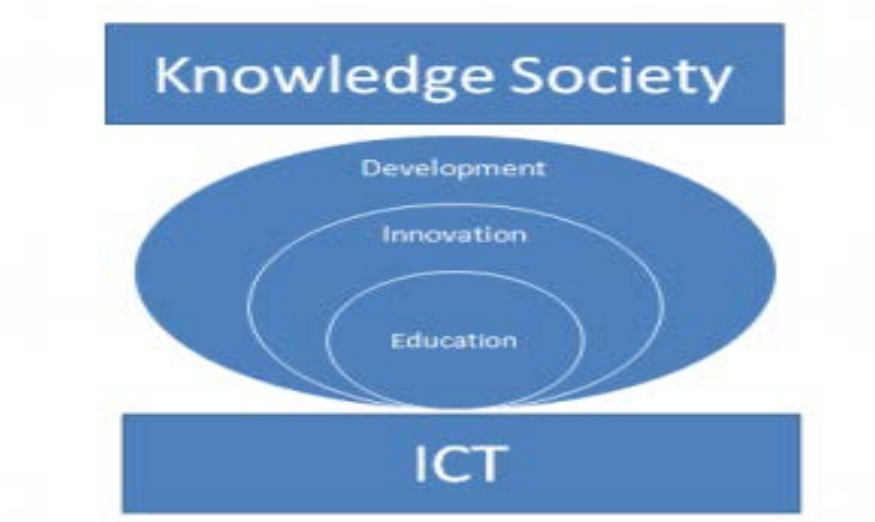


Figure 2.1. ICT as an enabler of innovation and development (GeSCI, 2011)

The schools are expected to create required qualities to transform their societies into Knowledge Societies. The growing importance of ICT has led a movement of integrating ICT into education systems to satisfy these requirements. Enabling learning anytime, anywhere, anyhow and offering more possibilities for storing, sharing and

retrieving knowledge, implementation of ICT is thus seen as necessary by education policy makers. UNESCO (2004) states three broad reasons for increase in use of ICT in education systems. These reasons are: 1) providing students with knowledge society attributes including the ability to communicate, collaborate and think critically, lifelong learning habits, higher order thinking skills the ability to access, synthesize and evaluate knowledge, 2) providing students with ICT skills and competencies to prepare students for working in an ICT-rich society and economy, 3) providing solutions for structural problems and deficiencies in education systems by improving administrative and teaching efficiency and enabling equality of access to resources, knowledge and expertise.

In order to compete with Knowledge Societies and their economies and become a Knowledge Society, governments are harnessing ICT technologies to establish national competitive advantage. The aims of using ICT technologies in education involve increasing students' economic competitiveness, raising student achievement, decreasing inequities in computer access, improving student engagement, creating an active environment for learning and tailoring teaching according to the needs of students (Bonifaz & Zucker, 2004). Using ICT in education has the power to increase the quality of learning and teaching as it provides opportunities for learning about learning, motivation for learning, easing the acquisition of basic skills, fostering inquiry and exploration, preparing for the real world, teacher training, teacher support and teacher empowerment (Haddad & Jurich, 2001).

2.2. Information and Communication Technologies (ICT)

Since the introduction of first computers in the mid-1940s, the computer technology has been developing at a rapid pace. The introduction of computer related technology such as scanners, printers, projectors followed the building of the first electronic computer ENIAC which weighed 27 tons and took up 167 metre square (Campell-Kelly & Aspray, 1998). In 1990s the World Wide Web, Internet browsers and search engines were invented successively. In 2000s an upgraded version of World Wide Web -Web 2.0- which allows interaction and collaboration among users were introduced (Graham, 2005). The need for a term referring these new technologies led the rise of the term Information and Communication Technologies (ICT). Tinio (2003)

defines ICT as different kinds of resources and tools which are used to create, diffuse, store and control the information and to communicate. ICT involve and cover all the technologies via which signals are detected and interpreted, information is exchanged among people and communication is provided. Therefore, ICT comprise a variety of technologies some of which can be seen in Figure 2.2.

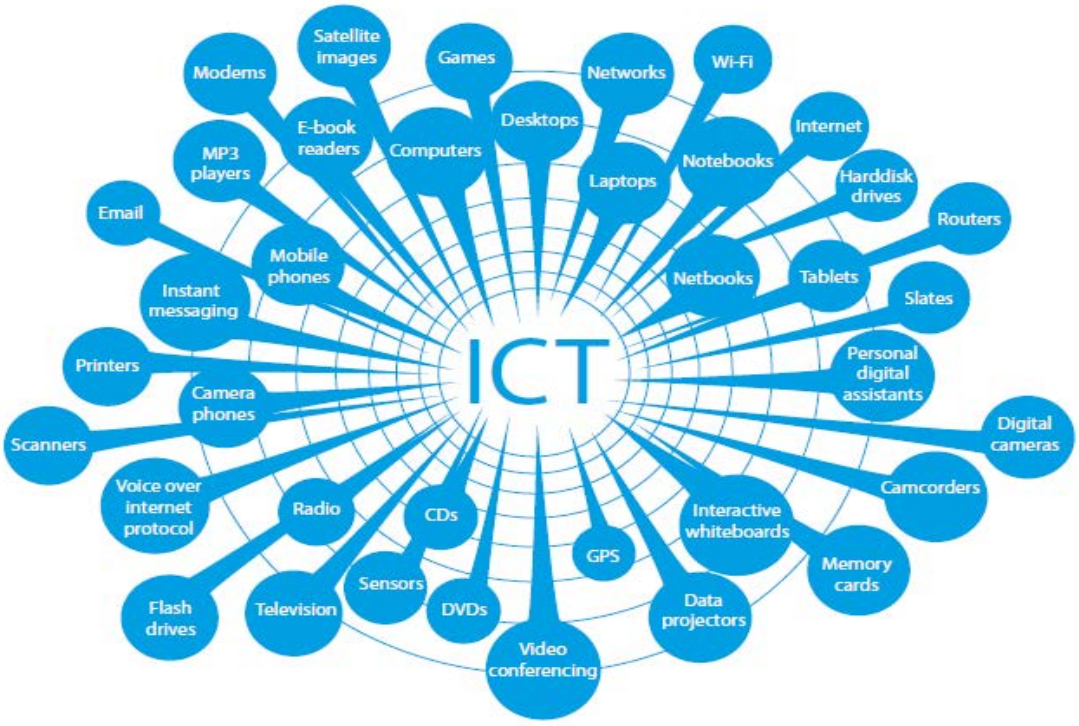


Figure 2.2. The technologies ICT comprise (UNESCO, 2010)

UNESCO describes the effect of ICT as “the third revolution” in its 2005 report “Towards Knowledge Societies”. According to UNESCO (2010) the first revolution was the invention of written language which for the first time enabled people to store and retrieve information without memorisation. The invention of printing press brought the second revolution. The second revolution made the diffusing of information possible with the publication of books. Similar to other revolutions, ICT as the third revolution changed the society by broadening the diffusion of information and knowledge. With the dramatic changes ICT have generated, new jobs and career options have been created, in order to increase the efficiency new technologies have implemented into various fields, old jobs have been changed and machines have taken their place in

production. Such ICT tools as the Internet, Social Networking Sites and wikis are still transforming our lives which may result in the fourth revolution (UNESCO, 2010).

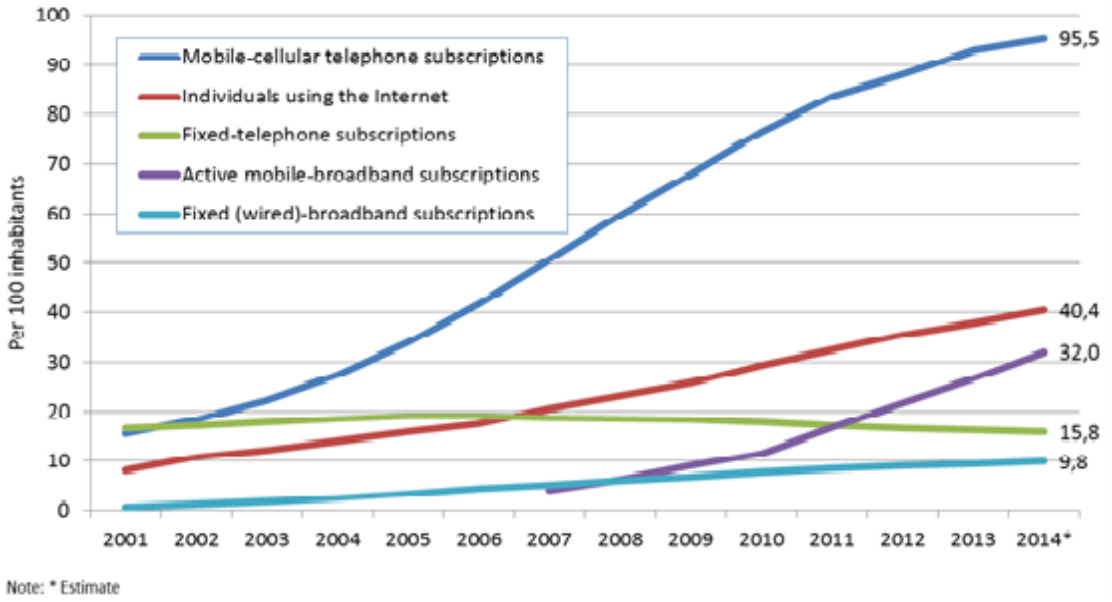


Figure 2.3. Global ICT Developments 2001-2014 (International Telecommunication Union, 2014)

Figure 2.3 clearly shows the growth of ICT developments and infrastructure since 2001. The most dramatic change has occurred in mobile-cellular telephone subscriptions. While 15.5 of 100 inhabitants were subscribers of mobile cellular phones the rate rose to 95.5 of 100 inhabitants in 2014. Another significant change is in the use of Internet by individuals. Although only 8 of 100 inhabitants were able to use internet in 2001, as of 2014 the number increased to 40.4 of 100 inhabitants which makes up almost 3 billion people. The percentage of individuals using internet by regions can be seen in Figure 2.4. As is seen, Europe has got the largest rate with 74.8 of 100 inhabitants and Africa has got the lowest rate with 19 of 100 inhabitants. But even in Africa the increase is significant. The percentage rose from 10 to 19 between 2010 and 2014 in Africa (International Telecommunication Union, 2014).

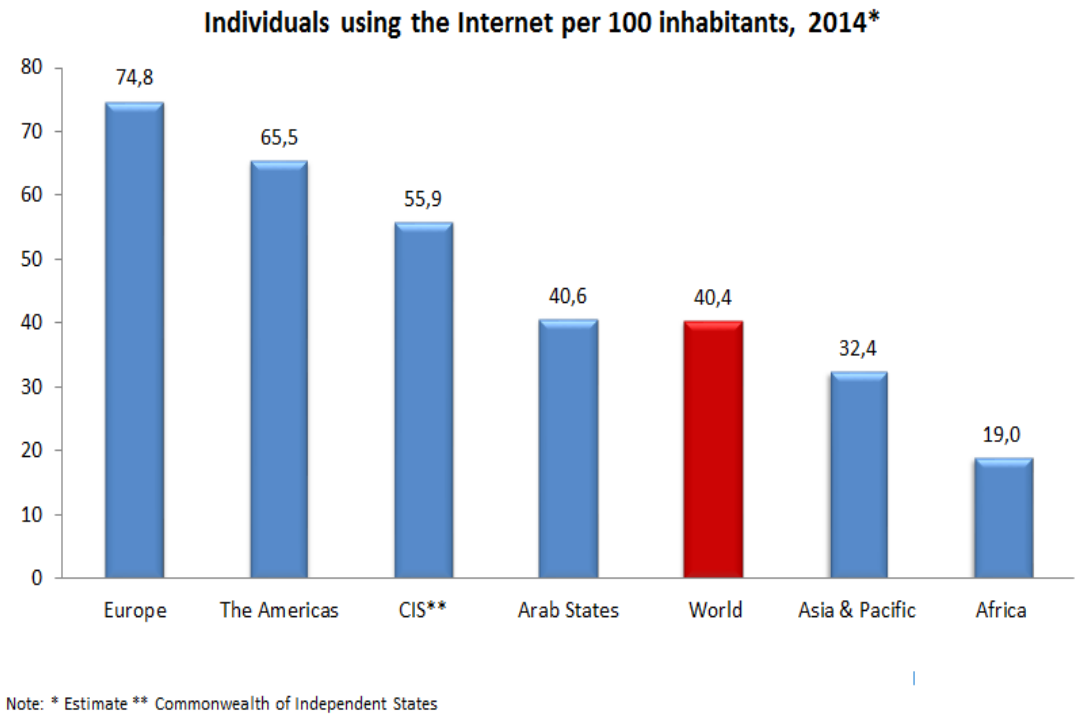


Figure 2.4. Percentage of individuals using the Internet by regions 2014 (International Telecommunication Union, 2014)

2.2.1. ICT in Education

It is clear that ICT have effected and changed the society. Nowadays ICT skills are needed almost in every field of the workforce. In order to deal with new jobs and requirements brought by ICT, employers have to be able to use ICT efficiently. It is difficult for modern societies to persist without ICT (UNESCO, 2010). Parallel to the changes in the requirements of the societies, the expectations from the schools have changed. In this context, ICT has become integral parts of the educational institutes and it has become a must for students to master ICT skills in order to be a qualified member of the society (Voogt, 2012). Specialised courses for ICT literacy were required and took their places in the curriculums of many countries in Europe (Royal Society, 2012).Although technologic changes in education were welcomed by students as they were grown up with technology, teachers found using ICT in teaching and learning difficult and needed support as they had to learn how to use ICT (Cornu, 2011).

The concepts of “digital natives” and “digital immigrants” which were introduced by Marc Prensky in 2001 may be useful to explain this dilemma. According

to Prensky the digital natives are the first generations growing up with new technology (2001). The digital natives are used to spend their time using ICT such as computers, video games and mobile phones; they receive information very fast, work best when they are online and prefer random access and games to serious works. Toys of the digital age have become an integral part of their lives. Prensky suggests that the thinking patterns of the digital natives have certainly changed as a result of the new technology. Prensky (2001) describes those who were not born in the digital age and have learned and adopted new technology later as “the digital immigrants”. Contrary to the digital natives, the digital immigrants have difficulties in operating ICT. They have to read manuals of electronic tools; they print a document to edit instead of editing on screen; they make a phone call in order to find out whether an e-mail is received or not. According to Prensky today’s children are all the native speakers of the digital language while most of the teachers and instructors speak with an accent of digital language (2001). These differences between generations constitute barriers for teachers to understand the students, communicate and collaborate with them and educate them. The new generation is aware of the fact that schools are not the solely places to acquire knowledge and the only sources of knowledge are not encyclopaedias and textbooks (Cornu, 2011). Today’s pupils are multitasking; they are persistently online and express themselves via digital technologies; they receive and deal with information at a swift pace (Paiva Franco, 2013).

In order to bridge the gap between society and technology, officials have selected the education as the primary mean of introducing new technology which led to major changes in the whole education system (Player-Koro, 2012). Pelgrum (2001) suggests that education in the information society changed the role of schools, teachers, students and parents. While schools used to be isolated from society, now they are integrated in society. Similarly parents did not involve in learning process, help their children and provide life-long learning models for their children in the past but nowadays they are active in learning process, help their children and provide life-long models for their children. Teachers and students are affected more directly as they are actively engaged in the teaching and learning process. Teachers cannot insist on yesterday’s education and therefore need to comprehend required ICT skills and find new ways of teaching (Cornu, 2011). Teachers were seen as knowledge transmitters,

primary sources of information, evaluators and authorities that control and direct all features of learning whereas their roles have moved to learning facilitators, coaches, collaborators, co-learners, knowledge navigators that give student more responsibilities and options for their own learning and help students evaluate their own progress after the change brought about by the use of ICT in instruction (Pelgrum, 2001; UNESCO, 2010; Hämäläinen & Cattaneo, 2015).

Similarly instructional use of ICT also resulted in a switch in the roles of students. The students used to receive knowledge passively, reproduce the knowledge transmitted by teacher or textbooks and learn mostly at schools in solitary activities in the past, while nowadays they participate actively in the learning process, they produce knowledge and ask questions, learn collaboratively in group activities both inside and outside the schools (Pelgrum, 2001; UNESCO, 2010). Students have become active researchers who search the web and communicate virtually by sending e-mails, posting in blogs and using social network to complete the tasks.

Using ICT in education has brought new terms as well as changing the roles of stakeholders of education. One of these terms is E-learning. E-learning is the use of computer network technology through the Internet to provide information and instruction (Welsh, Wanberg, Brown & Simmering, 2003) or simply the use of an internet browser for learning (Tinio, 2003). E-learning has numerous advantages : it is time saving and cost effective; individuals can learn at their own pace with e-learning and it removes the time and space barrier and enables learning anytime and anywhere (Virtual College, 2015). Blended Learning is another term brought by use of ICT in education. Garrison & Kanuka (2004) defines blended learning as the integration of face-to-face classroom communication with online learning experiences (See Figure 2.5). For example a classroom environment can be enriched by both printed and online materials or an online session can be enriched by face to face instruction of teacher. Blended learning has the advantages of both traditional classrooms and interactive capabilities of the Internet. Blended learning provides pedagogical richness, social interaction, cost effectiveness, personal agency, access to knowledge, and ease of revision (Osgurthope & Graham, 2003). The last term to be explained is open and distance learning. Commonwealth of Learning (2000) defines open and distance learning as:

> "a way of providing learning opportunities that is characterized by the separation of teacher and learner in time or place, or both time and place; the use of a variety of media, including print and electronic; learning that is certified in some way by an institution or agency; the possibility of occasional face-to-face meetings; and a specialized division of labour in the production and delivery of courses; two-way communications that allow learners and tutors to interact" (Commonwealth of Learning, 2000, p.2).

The advantages of open and distance learning lie behind the accessibility and flexibility it provides. Today many universities around the world have open and distance learning departments.

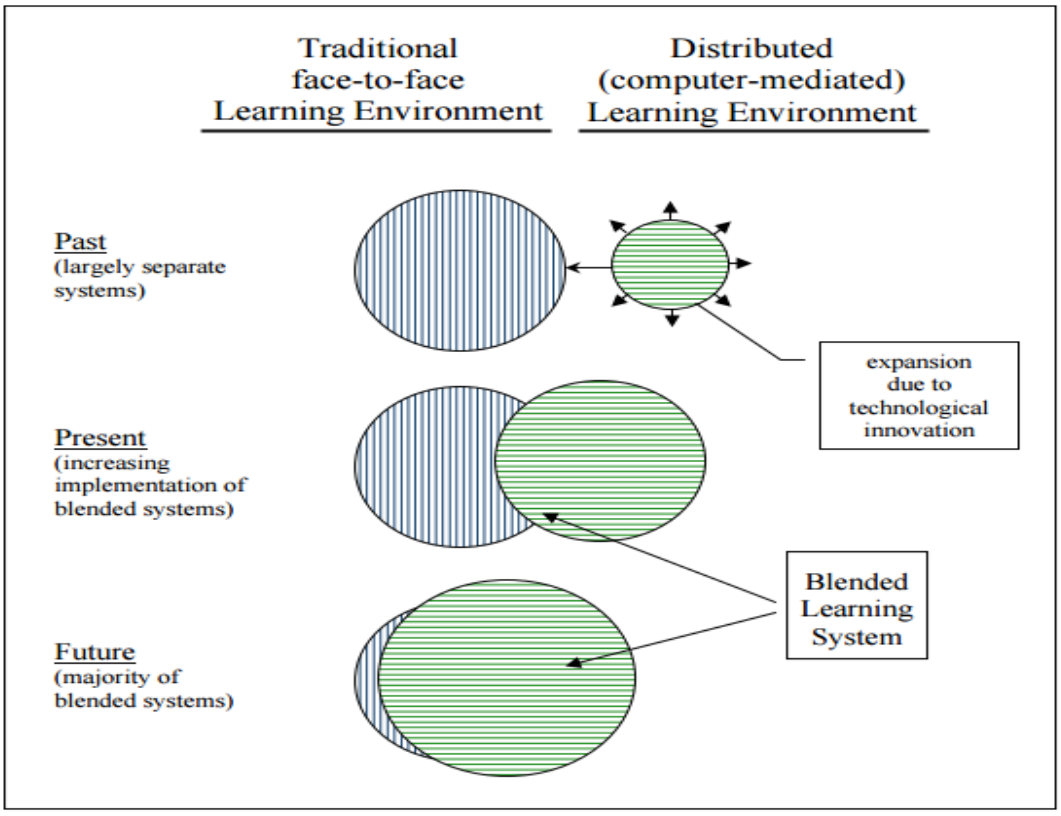


Figure 2.5. Evaluation of blended learning (Bonk & Graham, 2004)

It is obvious that the web technology has a significant importance as the growth of the web technology has influenced the development of many ICT tools (Moore, Morales & Carel, 1998). Therefore, understanding the advancements in the web technology may be helpful to comprehend the impact of it.

2.2.2. The Web Technology

Before explaining the web technology, it is vital to differentiate between the Internet and the web technology (usually World Wide Web or the Web). Although they are related and can be used interchangeably, the Internet and the Web are two different concepts. The Linux Information Project (2005) defines the Internet as the global network of interconnected computers network- more simply network of networks. The Internet uses a standardized set of protocols (TCP/IP) to link billions of devices around the world enabling them to communicate with each other and carries different kinds of services such as the World Wide Web, e-mail and file transfer protocol. On the other hand the Web is a system that supports device to device interaction over the Internet (Naik & Shivalingaiah, 2008). Being the most important part of the internet, the Web is built on the internet.

The Web was introduced by Tim Berners-Lee a scientist at The European Organisation for Nuclear Research known as CERN in 1989. The development of the Web can be divided into three stages: Web 1.0, Web 2.0 and Web 3.0. Web 1.0 is the first effectuation of the web technology and is considered as read-only web that allows user to search and read the information (Naik & Shivalingaiah, 2008). In this sense Web 1.0 provided one-way communication with very limited user interaction and content contribution. The only thing users could do was to read the information in the website which was created by the owner of the website. As the users of the web increased, a demand for more interactive and collaborative websites appeared. Web 2.0 which was introduced by Tim O'Reilly in 2004 met that demand by enabling users to create and contribute the content of the website.

According to Farley (2007) Web 2.0 is a term used to describe a new generation of web-based products and services that are built around the individual, rather than the individual's hardware, and/or permit interaction with the provider of information or other users. Compared to Web 1.0, Web 2.0 is user generated read and write web and provides multi-way communication. Web 2.0 gives more interaction opportunities with less control (Aghaei, Nematbakhsh & Farsani, 2012). With the possibilities Web 2.0 provides, users can create their own content, upload a video, change the content created by other users and interact with one another in web sites such as YouTube, Wikis, Blogs

and Facebook. For example, a musician can upload a video to YouTube as well as watching other videos and the other users can make comments and provide feedback under the post of the musician. A simple comparison of Web 1.0 and Web 2.0 is presented in Table 2.1.

Table 2.1.

The Comparison of Web 1.0 and Web 2.0 (Aghaei, Nematbakhsh & Farsani, 2012)

Web 1.0	**Web 2.0**
Reading	Reading/Writing
Companies	Communities
Client-Server	Peer to Peer
HTML, Portals	XML, RSS
Taxonomy	Tags
Owning	Sharing
IPOs	Trade sales
Netscape	Google
Web forms	Web applications
Screen scraping	APIs
Dialup	Broadband
Hardware costs	Bandwidth costs
Lectures	Conversation
Advertising	Word of mouth
Services sold over the web	Web services
Information portals	Platforms

Web 3.0 (or the Semantic Web) refers to the next generation of the web technology. Pioneered by Tim Berners-Lee, Web 3.0 can be simply defined as the interaction between the computers and search engines and comprises the ways of this interaction (Hendler, 2010). The primary important aim of the Web 3.0 is to make the web readable by the machines (Aghaei, Nematbakhsh & Farsani, 2012). With the development of Web 3.0, web technology will evolve to an intelligent web. Web sites will connect our past searches with new ones in order to assist us in our searches. For instance, when we want to buy a product in an online-shopping site, our past orders will guide the site and the site will show us products similar to ones we bought before. In this context Web 3.0 will be read-write and execute web. Figure 2.6. may help us to understand the evaluation of the Web.

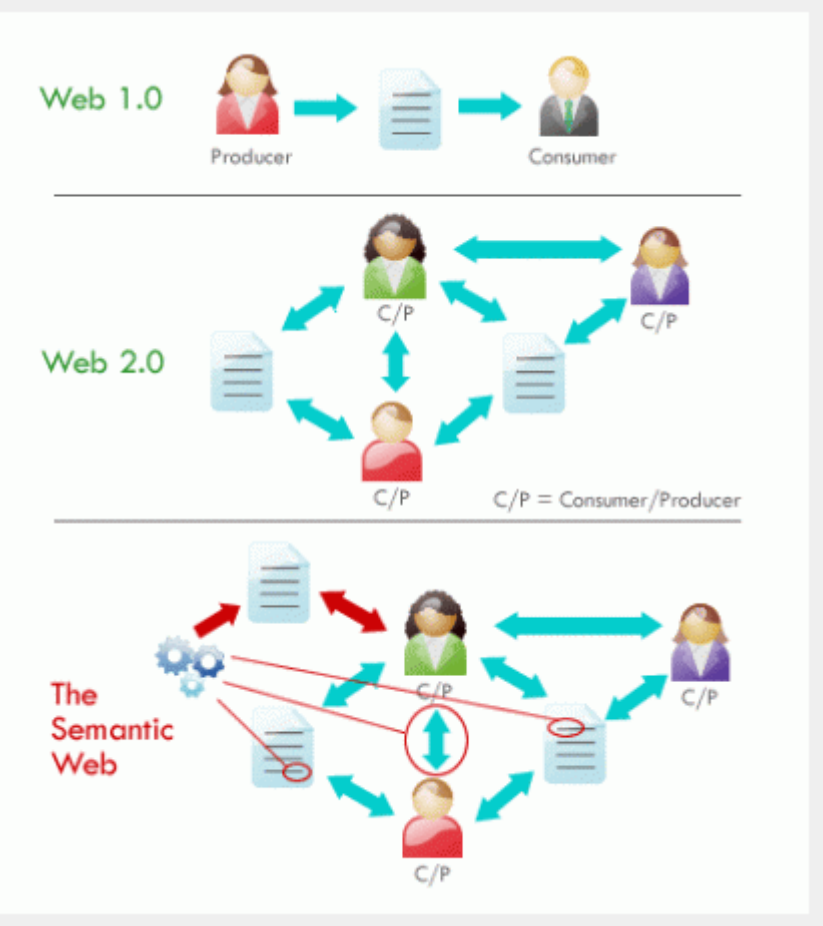


Figure 2.6. The evaluation of the Web (Source: prezi.com)

Parallel to the evolution of the web technologies, the opportunities of the teachers and students for accessing resources and materials have increased. Now thanks to Web 2.0 tools which include but not limited to wikis, blogs, social networking, instant messaging, video conferencing and podcasting both teachers and students have the possibility of creating their own materials. Teachers can make and publish videos, create discussion groups for their students in social media, create their own presentations as well as benefit from other presentations created by other teachers. Students can access authentic and meaningful materials, write in their blogs, interact with native speakers and share their own material with the rest of the users around the world. Even websites such as Facebook, Twitter and YouTube that was originally founded for non-educational purposes can be leveraged by teachers and students in learning and teaching. Five most common Web 2.0 tools are presented below.

Wikis: A wiki can be described as collaborative web site whose users can edit and contribute to its content. The most well-known example of a wiki is "Wikipedia-The Free Encyclopaedia" (http://en.wikipedia.org) which is estimated to be visited by 475,000,000 visitors each month (eBizMBA Rank, 2015b). Wikis are not limited to texts and may include images, recordings and films. Wikis give users freedom to search or browse for information as well as creating new contents and modifying the contents created by other users which may be used as a learning method of virtual collaboration (Boulos, Maramba & Wheeler, 2006).

Blogs: A blog is the abbreviation of the word weblog. Blogs are websites that function like online diaries and the visitors can make comments and state their personal opinions on what the bloggers write (Rubio, Martin & Moran, 2010). Blogs have the advantage of providing reflection on students' own experiences and interacting with others by sharing contents and leaving comments (Bryant, 2006). Blogger and LiveJournal are the largest blog sites.

Social Networking: Social Networking (SN) refers to the online communities where users can create their personal profile, develop their own space and interact with other users. Users in these sites share their profiles that include personal information such as name, age, hobbies and interests and keep in touch with other users. Users can upload and share videos and images as well as posting status updates and making comments under the posts. The most common Social Networking site is Facebook which is estimated to have 900,000,000 monthly users (eBizMBA Rank, 2015a). Examples of SN sites include Twitter a site in which users are limited to 140 words and users can send and read posts known as tweets, LinkedIn a site whose aim is to connect people in professional business area and enable them to communicate, Academia.edu in which scholars publish their articles and Pennster which is educational version of Facebook.

Content Hosting Services: Users can upload their contents and share them with the rest of the users in content sharing sites such as YouTube, Flickr, Pinterest and Instagram. YouTube which has 1,000,000,000 estimated unique monthly visitors allows users to upload and watch videos. Users can create their personal profile, subscribe the channels created by other users, list their favourite channels, videos or photos, make

comments on the videos or photos and provide feedback to users (The University of Melbourne, 2008).

Podcasting: Podcasting is creating audio or video (known as vodcast) and publishing it on the net for the users listen to or watch wherever, whenever and however they want. Users may access the podcasts or vodcasts online or download them to their computers or portable devices such as iPod and mp3 devices. According to Meng (2005) podcasting can be used for several educational purposes including students' assignments and presentations, making podcasting of lectures for students who are unable to attend the classroom and enabling auditory learners to audio record or review the textbooks.

2.2.3. ICT in Turkey

As the study was carried out in Turkey, it is vital to present information about ICT environment and developments of ICT in Turkey. Turkey puts a great deal of importance on ICT. Developing ICT, being one of the leading countries in e-transformation and increasing the percentage of computer literate population to %80 are among the targets of Turkey's Vision 2023 Project and ICT industry in Turkey is predicted to rise to a size of $160 billion by 2016 (International Investors Association, 2012). To achieve its goals Turkey has made important investments in ICT field. According to Turkish Informatics Industry Association (2014), the size of ICT expanded to □61.6 mill
□3,684 billion in developing ICT in public establishments in 2014 whereas the amount was □694 millio
government system (https://www.turkiye.gov.tr/) which has noe 21.700.523 registered users in 2008. 175 public establishments provide 1163 online services in the website. Citizens can access to the website with a password, electronic sign or mobile sign and utilise the services. Turkey also launched its national satellite programme in December, 2014. Turkey will be among the 10 countries building its own satellite at the end of this project. Furthermore, 4G (fourth generation of mobile communication) technology is expected to be tendered in 2015 and TTNET the Internet supplier of Turkey announced that the company will provide free Internet connection for two years for those who do not have Internet connection in their houses.

There has also been a significant progress in education. Since the beginning of 2000s Ministry of National Education (MNE) has been making important investments in ICT to enrich learning. Schools were equipped with ICT classrooms, education software, computers, overhead projectors, printers and Internet connection (Gülbahar & Güven, 2008). The latest movement of MNE in developing ICT in schools is the project of "Movement of Enhancing Opportunities and Improving Technology" (known as FATIH project). Launched in 2010 with the cooperation between MNE and Ministry of Transport, Maritime Affairs and Communication, the general aims of the project are to promote equality in education and to promote efficient use of ICT tools by improving ICT infrastructure in schools (MNE, 2012). 570.000 classrooms will be equipped with interactive white boards, multi-functional printers and broadband Internet connection. Besides, every student and teacher will be provided with a tablet PC. According to latest announcement of MNE (2015), 114.921 classrooms have been equipped with interactive white boards; 20.269 schools have been supplied with multi-functional printers; 3.516 schools have been accessed to broadband Internet connection, infrastructure work of broadband Internet connection is being maintained in 4.462 schools, tendering process of broadband internet connection in 9.052 schools has been completed and 737.800 tablet PCs have been distributed to teachers and students. Furthermore, the distribution of 700.000 tablet PCs in 2015 and 10.600.000 tablet PCs in 2016 is planned. It is expected that 433.565 interactive white boards and 45.653 multi-functional printers will have been installed and 27.030 schools have been accessed to fiber Internet connection at the end of 2015. According to data from Ministry of Development (2014), □1,4 billion v

MNE has also designed the website Education and Information Network – known as EBA- (http://www.eba.gov.tr/) to provide free electronic resources for the effective use of ICT tools in classrooms. As well as electronic resources EBA offers videos, images, audios, e-books, discussion groups and educational software to all stakeholders of education who can access to website whenever and wherever they want. In addition to FATIH Project and EBA, MNE launched its e-school system (https://e-okul.meb.gov.tr/) within the project of Ministry of National Education Information System in 2007. Both private schools and state schools use this website for all kind of administrative process such as registration, application for national exams, grades, e-

report cards and graduation. Parents can monitor their children's progress by accessing the website. MNE has recently redesigned the website and developed mobile application for the e-school system. Finally, Ministry of National Education introduced the educational software DynEd which is the abbreviation of "Dynamic Education" and is used in language learning in primary and secondary schools in 2007-2008 academic year with the cooperation of SANKO Holding. With a latest announcement of MNE, DynEd has become compulsory for all levels of schools as a supplement to English lessons.

According to Turkish Statistical Institute's survey which was held with participants aged between 16 and 74 (2014), percentage of computer usage in houses which was only %23,6 in 2004 rose to %53,5 in 2014. Similarly there was a significant rise in percentage of houses with access to Internet and individuals using the Internet. Although the percentage of houses with access to Internet was %7 in 2004, it increased to %60,2 in 2014. While only % 18,8 of Turkey's population had access to the Internet in 2004, the amount expanded to % 53,8 in 2014 which is over the world average. The purposes of the Internet usage were also a part of the survey. The findings show that majority of the participants use the Internet for participating in social networks (%78,8). Other purposes are stated as followings: reading online news (74,2), searching information about services or goods (67,2), playing or downloading films, music, images and games, sending and receiving e-mails (%53,9), uploading self-created contents (47,8), listening to web radio or watching television (46,8), making phone calls or video calls over the Internet (37,1) and making online appointments with health institutions (31,6).

As the statistics points out Turkey has broken through in ICT in the last decade and Turkish society is getting used to ICT tools. Thanks to the latest developments and investments in ICT, teachers and students are now supported with technological hardware and software and have access to technology in schools. Although teachers are expected to use this technology effectively to promote learning, using technology in classroom or not depends heavily on teachers. This situation shows the importance of the present study as it is tried to be found out how ICT tools are used by EFL teachers in Artvin. For this reason technology in Language Learning and Teaching is explained in next chapter.

Considering the rapid growth of ICT technologies and possible advantages of using technology in education, it is not possible for language learning and teaching field not to leverage technology. Technological advancements in language learning and teaching will be discussed in the following parts in order to interpret the technology in language learning and teaching.

2.3. Technology in Language Learning and Teaching

In their book 'Techniques and Principles in Language Learning" Larsen-Freeman and Andersen (2011) argue that chalk and blackboard may have been used as technology for years because technology in language exists in two aspects:

> "There are two main ways to think about technology for language learning: technology as providing teaching resources and technology as providing enhanced learning experiences. On the one hand, if we think of technology as providing resources, then it is clear that technology has long been associated with language teaching. …On the other hand, if we think of technology as providing enhanced learning experiences then implications are even greater" (Larsen-Freeman & Anderson, p.199).

Warschauer and Meskill (2000) also states that almost every kind of language teaching has been supported by its own technologies and the blackboard is an ideal technology for a teacher following Grammar-Translation Method as in this method one way transmission of information is implied, teacher's role is to explain grammatical rules and students have to perform translations. Corresponding to development of other methods, technology in classrooms has been overhead projectors, audio and video recording, film strips and playback equipment as resources in classrooms (Larsen-Freeman & Andersen, 2011). The introduction of computers in language teaching led a shift of methods and the terms such as Computer-Assisted Language Learning (CALL) and Computer-Mediated Co

mmunication (CMC) flourished (Solmaz, 2011).

Advancements in technology have been affecting language teaching and learning positively as well as language pedagogy and language use, besides the point of deciding if we use computers and technology in language learning and teaching or not has been

passed (Kern, 2006). Issues such as cost, efficacy of computers and copyright problems that used to be considered as concerns have been overcome (Garrett, 2009). While early use of computers are limited to drill and practice activities (Warschauer & Meskill, 2000) technology is no longer merely machinery that provides material or resources. With the computers, Internet and the web, it has become possible for teachers to provide opportunities of extended target language access and for learners to learn wherever and whenever they want.

The days when teachers were unfamiliar of technology; the infrastructure was very expensive and there was a lack of good educational software and sufficient number of technicians to support teachers and learners have also been passed. In her text entitled 'Computer-Assisted Language Learning Trends and Issues Revisited: Integrating Innovation' with which she updates her 1991 article, Garrett (2009) states that some of the todays' topics about technology "had not yet been imagined in 1991" (p. 719). A few statistics may support her opinion: In 1995 when graphical web sites were one and a half years old, the world's population connected to the internet was %1, while the proportion is now %40 (Thorne, Sauro & Smith 2015). Levy (2009) describes this change as following: "Inevitably, much has changed, especially with the introduction of multimedia, mobile technologies, and the advent of the Internet. These technologies, in turn, have led to new forms of communication, text production, collaboration, and social networking." (p. 769). Now numerous tools such as images, colour, animation, visual design, instant messaging, wikis, chat rooms, Skype, social network sites and blogs which provide new forms of discourse, authorship, identity construction and which enable new ways to choose, maintain and form learning communities are available for use (Kern, 2006).

Nevertheless, It should be borne in mind that the effect of technology used in language learning and teaching depends on how it is used not the technology itself because an improper use of any technology holding a great educational potential might not effect learning positively (Zhao, 2003). Therefore, the understanding of what a technology achieves is vital as the alternatives of technology increase; the diversity may easily overwhelm the learners and the teachers (Levy, 2009).

Technology has changed, is changing and will change language learning and teaching techniques because of its ever-changing nature. Thus, language teachers should be prepared to deal with challenges and changes that technology will bring in the future. A significant progress has been made since the development of CALL (Levy, 2009). Teachers who used to manage with textbooks, blackboards and tape recorders in their teaching are now experts at using technology to introduce skills and are empowering their learners by providing them access to Web 2.0 tolls that enable learners to participate in real contexts (Peacock, 2013). Nowadays using technology in language learning and teaching provides solutions to many problems which have long been considered to be the main barriers for learning by increasing autonomy and control, improving language skills, offering a more student-centred learning environment, engaging students actively in learning, providing real contexts, developing confidence in language abilities, providing interaction, meeting affective needs of learners and providing appropriate feedback (Jewell, 2006; Butler-Pascoe, 2009). Taking these benefits of using technology in education into consideration, it might be said that the range of technologies will shape the techniques used in language learning and teaching in the future.

2.4. Computer Assisted Language Learning

Computers have been used in language learning and teaching since the integration of computers into education. As a result of the use of computers in education and language learning, the term Computer Assisted Language Learning (CALL) flourished. CALL's origin dates back to 1960 when the first software for language learning was created (Todd, 2009). Having various definitions, CALL can be defined as "the search for and study of applications of the computer in language teaching and learning." (Levy, 1999), "any process in which a learner uses a computer and, as a result, improves his or her language" (Beatty, 2003) and "the full integration of technology into language learning" (Garrett, 2009). CALL has strengthened itself as an innovatory research field with international organisations, annual conferences and series of refereed journals (Warschauer, 2012). Both technology and CALL share parallel advancements throughout the history. With the introduction of Web 2.0 applications and

technologies, CALL now provides opportunities for learners to produce content and learning material as well as consume those (Warschauer & Grimes, 2007).

Although it is possible to divide the history of CALL into many categories, the most agreed on categorisation is stated by Warschauer (1996, 2000 and 2004). Warschauer divides CALL into three phases as behaviouristic CALL, communicative CALL and integrative CALL. However, these stages have not taken place in a rigid sequence and previous stages continue as the new stages have emerged. The stages of CALL can be seen in Table 2.2.

Table 2.2.

Three Stages of CALL(Based on Warschauer 1996, 2000, 2004)

Stage	**1970s-1980s: Structural/Behaviouristic CALL**	**1980s-1990s: Communicative CALL**	**21st Century: Integrative CALL**
Technology	Mainframe	PCs	Multimedia and Internet
English Teaching Paradigm	Grammar-Translation Audio-Lingual	Communicative Language Teaching	Content-Based ESP/EAP
View of Language	Structural (a formal structural system)	Cognitive (a mentally-constructed system)	Socio-Cognitive (developed in social interaction)
Principal Use of Computers	Drill and Practice	Communicative Exercises	Authentic Discourse
Principal Objective	Accuracy	And Fluency	And Agency

2.4.1. Behaviouristic/Structural CALL

Behaviourism was the dominant psychological theory until the early 1980s. Therefore, education theories and educational approaches were shaped by behaviouristic theory until 1980s. Behaviourists believed that learning was a change in behaviour, learning took place through response to external stimulus and positive or negative

reinforcement shaped the behaviour (Demirel, 2007). Behaviourist theory was the base of Audi-Lingual language learning method in which it is thought that learners acquire target language's sentence patterns through conditioning, shaping and reinforcement (Larsen-Freeman & Anderson, 2011).

Influenced by Behaviouristic theory of learning and Audio-Lingual language teaching paradigm, Structural CALL featured drill-and-practice activities which were repetitive language drills (Yang, 2010). Computers were seen as mechanical tutors that hampered motivation as it was impossible for students to learn at their individual pace (Gündüz, 2005). The PLATO (Programmed Logic for Automatic Teaching) System was the most significant of tutoring systems which were developed at that time. The project of PLATO System was carried out by University of Illinois (Levy, 1997). Having its own special hardware with terminals and central computers, PLATO system provided short grammar explanations, drills for vocabulary and grammar and translations tests (Ahmad, Corbett, Rogers, & Sussex, 1985).

2.4.2. Communicative CALL

Late 1970s and early 1980s witnessed a series of important events: the rejection of Behaviourism, the dominance of Cognitivist theory and the introduction of microcomputers. Cognitivism which emphasized the innate process of mental states became the dominant pedagogical and theoretical theory at that time. Similarly, Audio-Lingual method fell short of expected results and lost its popularity in the field of language learning. The need for a more communicative approach that drew attention to interaction was appeared. Therefore, Communicative Language Teaching or Communicative Approach which emphasized the communicative competence, teaching of four skills, interdependence of language and communication were developed (Richards & Rodgers, 2001). The growing popularity of microcomputers -ancestors of today's personal computers- allowed students to work individually in a great variety of tasks (Warschauer, 1996; Gündüz 2005; Yang, 2010). These changes in language teaching approaches and technology led to a new phase for CALL.

Based on communicative approach, Communicative CALL proposed implicit grammar teaching instead of explicit grammar teaching, focusing on using forms

instead of focusing on forms themselves, encouragement to generate original utterances instead of manipulating prefabricated language, flexibility to student responses, exclusive use of target language and creating environment for natural target language use (Underwood, 1984; Jones & Fortescue,1987; Phillips, 1987). Although computer's role as a tutor maintained, computers gained two additional roles: computer as stimulus whose aim was to stimulate discussions, writings and critical thinking of students and computer as tool which aimed enabling students to understand or use the language (Warschauer, 1996). Text reconstruction programs, simulations and concordancing programs were among the popular software developed at that time (Warschauer & Meskill, 2000). The main distinction of Communicative CALL and Behaviouristic CALL lay on how the software used by teachers and learners as well as the software used (Warschauer, 2000).

2.4.3. Integrative CALL

Two important innovations marked this phase: the introduction of multimedia and the introduction of Internet. At the same time, socio cognitive view which emphasized the observation, social interaction and experiences became dominant and the language teachers started to support the idea of using real language in meaningful authentic context and integrate four language skills using integrative approaches such as content based, task based and project based (Warschauer & Healey, 1998; Lee, 2000). As a result the third phase of the CALL – Integrative CALL was set. The mainframe of integrative CALL whose basis were multimedia and Internet was multimedia networked computer (Warschauer & Healy, 1998).

With multimedia technology, creating a more authentic environment for learning and effortless integration of skills became possible. Besides, multimedia technology provided students opportunities for higher degrees of control over their learning (Warschauer, 2000). Internet and the arrival of World Wide Web in 1989 made a significant effect on CALL by enabling both synchronous and asynchronous communication between teacher and learners (Davies, Walker, Rendall & Hewer , 2011). Furthermore, the Internet supported learners and teachers with valuable sources and materials such as online activities whose aim was to increase the interaction

opportunities within a classroom and out-side of class activities which can be performed virtually via e-mail or conferencing (Warschauer & Meskill, 2000).

2.4.4. The Advantages of CALL

The role of computers has been changed over years. Although the main use of CALL was limited to drill and practice activities in the past, the computer technology now allows learners and teachers to implement technology into learning and teaching better (Yang, 2010). As a result of advancements in computer technology, today computers can record, analyse and present data on students' performances through the learning process (Lu, 2006). Several studies have indicated the advantages of using technology in language learning and teaching.

According to Warschauer & Healey (1998), using computer technology in language learning environment has got many advantages including: 1) multimode practice with feedback, 2) the opportunity of enabling individualisation for students in large classes, 3) collaborative or competitive pair and group work on projects, 4) the factor of fun, 5) an abundance in available resources and learning styles, 6) investigative learning with a large quantity of language data and 7) real life building of skills in computer use. Applying the Internet technology into education increases students' attention as it provides images, colours, different kinds of letter which attract students and the Internet provides cheap, quick and reliable ways of interaction for learners all over the world (Cabrini Simoes, 2007). Moreover, students can send e-mails to each other using the internet and by this way they communicate in a real and natural environment (Warschauer, 1995).

Han (2008) also states the advantages of CALL as followings: 1) CALL programs offer more independence for learners, 2) CALL programs provide the learners with option of studying whenever and wherever they want, 3) CALL programs are great stimuli for language learning, 4) computers can ensure interaction between teachers and learners and 5) computers enable the teachers to access a variety of materials. According to Wang (2012) CALL is beneficial to teachers and learners as using CALL improves the efficiency of teaching and teaching mode as well as empowering teachers to easily create more communicative environments for their students. Furthermore,

Singhal (1997) suggests that technology can allow learners to learn how cultural backgrounds of people influence their worldviews by enabling learners to participate in target language's culture, students can use the internet for searching additional learning activities and they can produce their own original works as well as access the works produced by others.

Language teachers ought to use computer technology to: 1) raise interest in the subject, 2) support learners' communication capacity, 3) improve the effect of teaching, 4) provide a context for learners, 5) widen the understandings of students to obtain a perspective to Western culture, 6) offer flexibility to content and 7) increase interaction between teachers and learners (Shyamlee & Phil, 2012). In addition, using technology in language learning potentially lowers the anxiety in classroom (Levy, 1997; Chapelle, 2001; Braul, 2006; Ozerol, 2009). In their study in which they review other studies, Riasati, Allahyar & Tan (2012) states that CALL has got several benefits including: 1) engagement in tasks by increasing motivation, 2) improvement in academic ability, 3) a shift from teacher-centred classroom to learner-centred classroom, 4) the opportunity for learners to assess their own works and 5) encouragement of communication and collaboration activities by allowing learners to interact with language learning materials and resources. In another study, Fu (2013) claims that using CALL improves the quality of language learning and teaching as: 1) computers stimulate productive classroom activities in the process of acquiring four language skills, 2) learning takes place both in and out of the classroom with CALL, 3) it also provides individualised, constant and authentic activities, 4) it promotes learner-centred classrooms and 6) learners get immediate feedback in CALL activities.

Finally, Lee (2000) states that internet technology contributes significantly to experiential learning, motivation, enhanced student achievement, access to authentic materials, greater interaction, individualisation, global understanding and independence from a single source of information since it is possible for students to access a wide range of authentic sources, to learn at their own pace, to study language in a cultural context and to communicate with people all over the world with the World Wide Web.

2.4.5. The Disadvantages and Limitations of CALL

Even though there are numerous advantages of using technology in language learning and teaching, there are still some limitations and disadvantages. Riasati, Allahyar & Tan (2012) categorise these disadvantages and limitations in five groups: lack of access, lack of effective training, the attitude of teachers, the attitude of students and lack of time.

Lack of access: Hardware, software and Internet connection are required in order to integrate technology into education (Hani Bani, 2014). These requirements may be relatively expensive for low-budget schools and low-income learners and once they become obligatory resources in the classroom unfair educational conditions may occur (Gips, Di Matteo & Gips, 2004). Inequitable opportunities to access to these requirements can be frustrating for both teachers and language learners (Mike, 1996). Moreover, it may be needed to replace the old computers with upgraded versions swiftly since technology changes very quickly which may be unaffordable for most people (Abu Seileek & Abu Sa'aleek, 2012).

Lack of effective training: Both teachers and students are required to have basic computer skills in order to use technology in classroom. Having required technology is insufficient to improve the quality of education if the teachers are not able to adopt this technology as educational tool in the classroom (Romano, 2003). Nevertheless, many teachers are lack of having necessary competency to use computers and the Internet effectively as well as sufficient training and technical support (Levy, 1997; Coghlan 2004; Lai & Kritsonis 2006; Lu, 2006; Abu Seileek & Abu Sa'aleek, 2012).

The attitude of teachers: Teachers' attitude is a significant barrier to use technology in classrooms. Teachers tend to perform their teaching in traditional ways since they don't feel comfortable with the new technology (Abu Seileek & Abu Sa'aleek, 2012). Some teachers resist any change since thye regard technology as unmanageable tools (McGrail, 2005) and traditional teachers are scared of losing the authority in the classroom (Fang & Warschauer, 2004). Teachers are lack of confidence in their technologic knowledge and are afraid of a failure and thus they feel anxious about using technology (Beggs, 2000).

The attitude of students: It has been concerned that the sudden and radical shift from traditional classrooms to technology based classrooms may affect students negatively and may result in poor academic performance since the students may resist such a drastic shift. Moreover, students may waste their time surfing on the net as it is fun for students (Correa, 2001). Besides, Students are also required to have basic skills of computer technology to participate in the lessons regardless of the simplicity of the programs used and this may be resulted in difficulties in adjusting the computer technology (Abu Seileek & Abu Sa'aleek, 2012).

Lack of time and technical support: Another limitation of CALL is the time pressure both inside and outside the classroom (Levy, 1997). Teachers report that integrating technology into classroom environment is more time-consuming than traditional classroom environment in which computer technology does not exist (ChanLin, Hong, Horng, Chang & Chu, 2006). Singhal (1997) also states that accessing information may take a great deal of time for the reason that the Internet provides a lot of irrelevant contents. Furthermore, Abu Seileek & Abu Sa'aleek (2012) claim that there may be some situations when the computers may have technical problems and may break down which as a result waste a lot of time.

In addition to these disadvantages and limitations, Bani Hani (2009) states that teachers consider the lack of authentic and efficient programs as the reason for their unwillingness to implement computer technology to their classrooms. Most of the tools and programs used in the classroom are not produced for educational purposes and the implementation of these programs puts a pressure on teachers. Moreover, computer is merely a machine that performs what it is programmed to do and has got a limited artificial intelligence for that reason it is not be able to handle learners' unexpected problems in the learning process (Seileek & Abu Sa'aleek 2012).

Language teachers have to acknowledge both advantages and disadvantages of CALL in order to master the limitations of using technology and leverage the benefits of technology to improve the language teaching and learning (Han, 2008). Obviously, computer technology cannot replace the teacher in the classroom environment but will without doubt change the role of teacher (Bani Hani, 2014). Therefore English

Language Teachers ought to improve their skills as there is always need for improvement.

2.5. Connected Studies

As ICT has been commingled into ELT field since 1960s there is a wide range of studies in the literature. The topics include the role of ICT in education, the use of computers as communication tools, the effect of ICT on improving language learning and teaching, the factors preventing and supporting ICT use and the attitudes of teacher against ICT. Both national and international studies about ICT will be presented in this part.

2.5.1. International Studies

In a study carried out by Keijo Sipilä with 292 Finnish teachers (2013), it was found that majority of the teachers lacked necessary knowledge or skills to use ICT in enhancing learning and those who advanced in ICT used ICT more frequently in teaching. In another study, Sipilä (2011) who investigated Finnish teachers' purposes of ICT use and perceived values about ICT in education found that ICT was mostly used for administrative purposes, teachers' use of ICT in classroom heavily depended on their proficiency level and primary school teachers valued using ICT in teaching activities more positively than secondary school teachers although it was secondary school teachers who expressed more active use of ICT in teaching. Another significant result of the study was that pedagogical thinking in institutions failed to keep up with technological advancements. Besides in a case study attempting to determine the effect of intrinsic and extrinsic barriers in teacher's use of ICT, Chen, Tan & Lim (2012) found that lack of time, the strictness of curriculum, teacher beliefs and attitudes and ICT infrastructure were the main barriers for teachers.

In their study which was conducted on 278 teachers in Spain, Badia, Meneses and Sigales (2013) tried to identify the factors affecting the use of ICT in classrooms. They pointed out five reasons which are utility and educational setting, availability and access in classroom, access outside the classroom, teachers support and technological expertise. In another study conducted with 254 EFL teachers in Iran, Rahimi and

Yadollahi (2010) found that there was a significant positive relationship between using ICT in the classrooms and computer use, internet use and information technologies literacy. In a study investigating attitudes of university lecturers towards the integration of ICT into curriculum and ICT use in classroom, it was found that the more positive attitudes lecturers had, the more frequently they used ICT in classroom environment (Hue & Ab Jalil, 2013).

Abu Naba'h (2012) carried out a study to examine the impact of computer assisted teaching on the grammar performance of Jordanian EFL students. He found in his study which consisted of 212 students that computer assisted grammar teaching had positive effects on the performance of students by increasing their achievement. Drent and Meelisen (2008) argued that ICT competence was a precondition for the use of ICT in classroom and personal entrepreneurship of the teachers' were key to integration of ICT. Avidov-Ungar and Shamir-Inbal (2013) investigated the implementation of ICT in Israeli schools and reported that pedagogical change occurred at schools with teachers who had technological and pedagogical confidence and competency. Furthermore In their comprehensive study in Korea, Aoki, Kim & Lee (2013) revealed that ICT competency of teachers and their willingness to use ICT in their classroom practice increased the use of ICT in lessons and the most important factors prompting ICT use were ICT infrastructure, the efforts of administration and teachers.

Heaney (2012) suggested that that many teachers regarded ICT as a precious tool in language learning of primary school children by emphasizing on 'improving the natural learning process of the learner' (p. 165). In their study Hu & McGrath (2011) investigated the attitudes of teachers towards using ICT in English language teaching in Chinese higher education. They expressed that the most important barriers to using ICT in English language teaching were limited pedagogic expertise and ICT skills. They also added that lack of required training and support was decreasing the enthusiasm of teachers who had had positive attitudes towards using ICT in English language teaching. In another study conducted in Columbia, using ICT in classroom was seen necessary by the participants as it provides real life contexts for learning and makes learning enjoyable (Soto, Escobar & Baez, 2012). It is also found in the same study that although the participants could operate in ICT in their personal works, they were not able to use ICT in daily educational works because of lack of competency in ICT,

support and methodological skill. In a study conducted with in-service EFL teachers, it is found that although computer technology was seen as a practical teaching tool which provides real and authentic learning contexts, a variety of language inputs and enhanced ways of teaching, the use of ICT were precluded by certain intrinsic and extrinsic barriers which were lack of time, strict school curricula and textbook, insufficient infrastructure, lack of skill and knowledge (Nim Park & Son, 2009).

In their comprehensive study in Chinese context, Sang, Valcke, van Braak, Tondeur & Zhu (2010) proposed that ICT use in China could be divided into two categorisations: teacher supportive use and classroom use. Teacher supportive use included using ICT for out-of classroom practices such as administration, developing activities and preparing worksheets whereas classroom use included using ICT to promote and improve the quality of learning and teaching process in the classroom. They also found that teachers' competencies in computers and the supportive use of ICT directly influences teachers' ICT use in the classroom. In another study conducted in China, Li and Walsh (2010) found that although teachers were supported with satisfactory technological setting and agreed that ICT was necessary and beneficial for the EFL students, the use of computers was largely limited to slide show presentations of pictures, sentence and grammar structures. They also reported that teachers expressed the need for both pedagogical and technical training in order to integrate ICT into their classroom practices.

In their study investigating the relationship between personal beliefs and computer use of teachers, Tondeur, Hermans, Balcke & van Braak (2008) found that teachers' use of computers was significantly affected by their personal educational beliefs. As a result of this, different kinds of computer use were detected in the study. For example both teachers with strong constructivist beliefs and teachers with strong traditionalist beliefs were found to approve educational computer use. In Albrini's study which was conducted in Syria with 326 EFL teachers (2006), attitudes of high school teachers towards ICT was explored and the relationship between teachers' attitudes towards computer and five independent variables – cultural perceptions, computer access, computer attributes, cultural perceptions and personal characteristics- was investigated. Teachers are found to have positive attitudes towards using ICT in education. A strong positive correlation between teachers' perceptions of computer

attributes and their attitudes towards using ICT in education was also indicated in the study. Tasir, El Amin Abour, Abd Halim & Harun (2012) carried out a study to determine the relationship of three variables –competency, confidence level and satisfaction – among Malaysian postgraduate students and found that there was a strong relationship between ICT competency of teachers' and teachers' confidence level in using ICT. Prestridge (2012) tried to find out the relationship of teachers' ICT beliefs and their classroom practices in Australia. A relationship was detected between ICT confidence, competence and practice. Those teachers who stated a substantial amount of personal competency were found to have more confidence in using ICT in classroom practice.

Copriady (2014) examined the effects motivation of teachers on the willingness in applying ICT in learning and teaching process of science and social science. It is found in the study that motivation was a significant mediator and the most important factor on readiness to apply ICT in learning and teaching process. Wang (2014) suggested that emotional support should be provided for teachers who are eager to use ICT in their language teaching in higher education as ICT applications and tools could be frustrating. Although teachers had positive attitudes towards using ICT in their classroom practice and expressed happiness with their use of ICT, some teachers expressed negative emotions which were sadness, anger and anxiety because of student performance, unexpected responses and technological equipment. Another significant result of the study was that educational websites and software were not frequently used in classroom practice and the use of ICT was limited to presentations of PowerPoint, YouTube and social networking sites.

In her study Mumtaz (2000) suggested that teachers' belief about using ICT were central to integration of ICT and thus the policy maker, the teacher and the school should be addressed in order to implement ICT successfully. Mumtaz also stated that schools gave insufficient time and little support to teachers to manage and acquaint themselves with ICT which led to misunderstanding and confusion. Tondeur, van Keer, van Braak & Valcke (2007) focused on the influence of school policy on ICT integration. They found that policies of schools such as ICT support, training and plan 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 & 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.

Fiktorius (2013) changed the perspective and examined perceptions of high school student of using ICT in classroom practice. He found that majority of the students' welcomed and used ICT extensively in learning in the light of the instructions of their teachers. According to Fiktorius, students regularly visited the websites their teachers advised and found these websites interesting and helpful. Similar to Fiktorius, Ebrahimi, Eskandari and Rahimi (2013) found that Iranian students perceived technology-enhanced classroom as more learner centred and efficient than no-tech classroom. Furthermore Young (2003) tried to examine the potential effects of the integration of Internet into ESL class in Taiwan and found that the integration of Internet created a less stressful virtual learning environment that enabled students to discover and explore by lowering the emotional barriers of students', enabling students to express their own thoughts freely and enhancing critical thinking, communication skills and problem solving. Glassett and Schrum (2009) also examined student achievement over a two year project in technologically enhanced classrooms in USA. They found that the performance of students participated in the project notably increased at the end of the project.

Cox, Preston & Cox (1999) focused on the factors supporting teachers to use ICT in their classrooms. They found that teachers used ICT in their lessons as ICT made lessons more interesting and easier; ICT were fun and enjoyable for both teachers and students; ICT provides more diverse and more motivating environments for the students. Teachers also stated personal reasons for using ICT. These reasons included the improvement in presentation of the materials, the power ICT gave to the teachers in the school, the prestige using ICT gave to the teachers, the professional support ICT provided through the Internet and the efficient administration opportunity. Baek, Jung & Kim (2008) also tried to discover the factors affecting teachers' use of technology in the classroom. They discovered six factors influencing the use of technology in classroom: obtaining attention, accommodating to requests and expectations of others, relieving

physical tiredness, using common features of technology, using the intensified functions of the technology and class preparation and management. They also expressed that experienced teacher used technology involuntarily as a result of external forces whereas inexperienced teacher were willing to use technology in classroom.

2.5.2. National Studies

With the integration of ICT into national curriculum, the number of studies investigating ICT and ICT tools in educational contexts has been increasing. Therefore the presentation of the literature in the field of ICT in Turkey is crucial.

In an early study carried out by Akkoyunlu and Kurbanoglu (2003), perceived information and computer literacy self-efficacy of 666 pre-service teachers in Hacettepe University and the correlation between the perceptions were explored. A positive relationship was detected between information literacy self-efficacy and computer literacy self-efficacy. In their article "EFL Students Use of Technology in the Presentations", Ozad and Kutoglu (2004) explored the feelings and ideas of 60 second grade students who used technology in order to enhance their presentations at the Department of Radio, Television and Film, and Public Relations and Advertising. According to the study, %33 of the participants did not use any visual, %20 of participants used posters, %27 of the participants used overhead projectors and %20 of the participants used computers. Females were found to use more visuals than males whereas males were found to use more technological devices and have more confidence in technology than females. Students' reasons for using technology in their presentation were using technology made the topic more comprehensible, using technology made presentation more effective, using technology made expressing themselves easier and using technology is easier. Another significant result of the study was that although students were not taught how to use technological tools in lessons, they used them in their presentations learning with their own efforts.

Timucin (2006) tried to implement CALL into EFL lessons in a state university's Preparatory School in his case study. It is revealed in the study that teachers found 33-weeks of CALL implementation quite successful by adding that the teacher's role in the classroom was essential and CALL was useful with the existence of teachers.

Timucin added that a successful implementation depended on active participation and vigorousness of the teachers in the implementation process. Gulbahar (2008a) examined the factors conducing to pre-service teachers' employment of technology in a private university. She found that pre-service teachers supported the use of technology both inside and outside the classroom whereas they stated a rare use of technology in the classroom. Inexpert teachers and lack of in-service training, inadequate technological infrastructure and the number and the standards of the lessons directing technology were found to have significant effects on the effectual use of the technology. Gulbahar (2008b) also investigated pre-service teachers' attitudes towards computer and technology at the end of the course Instructional Technology and Material Development. She found that positive attitudes towards using technology in their future classrooms were developed by students and the students' computer competencies were improved.

In another study with pre-service teachers, Acıkalın (2009) examined the beliefs of pre-service elementary school social studies teachers' thoughts about using the Internet in classroom environment. The majority of the participants were found to be in favour of using the Internet in classroom practice of social studies. However participants reported several disadvantages and unfavourable features of using the Internet. They stated that the sources in the Internet were unreliable, the Internet prevented students from improving their research skills, students depended on prepared information and the Internet was time-consuming. According to the participants, the most beneficial advantages of the Internet were finding visuals and images and finding written information.

Goktas, Yildirim & Yildirim (2009) investigated the possible factors preventing and enabling the integration of ICT into pre-service teacher education of Turkey in their comprehensive study. It was found that lack of in-service training, lack of hardware and lack of suitable software and materials were the main obstacles to integrate ICT into pre-service teacher education program. Other obstacles included crowded classrooms, lack of appropriate model for institutions and lack of motivation. It was also found that having technology plan, offering in-service training and allocating more budget and support were the most agreed on possible enablers of the integration of the ICT. Other enablers included having at the minimum one computer in each of the classrooms and

one laboratory in each of the institutions, designing ICT related courses and offering more courses including ICT. Tezci (2009) conducted a study with 1540 primary school teachers in order to determine the effect of teachers on the use of ICT at schools. He found that the attitudes of the teachers towards the Internet and computers were generally positive and the most well-known and widely-used ICT tools were the Internet, graphics and presentation software, word-processing and e-mail.

In an another study trying to determine the ICT integration stages of in-service teachers and the factors influencing the integration, Yücel, Acun, Tarman & Mete (2010) found that ICT integration occurred in three stages. They also found that whereas teachers who were at the lowest stage of the integration felt insufficiency in using ICT, the teachers who were at the highest level of the integration expressed ICT competency. Sahin-Kızıl (2011) investigated the attitudes of the in-service EFL teachers towards using ICT. She found that in-service EFL teachers had positive attitudes towards using the Internet in classroom practice and they thought that computers were more beneficial and more suitable for the curriculum goals than traditional methods. According to the study the most commonly used ICT tools were gradebook, the Internet, repetitive practice software, PowerPoint presentations and interactive exercises. Aypay, Celik, Aypay & Sever (2012) also investigated the technology acceptance of pre service teachers in their comprehensive study which conducted in five education faculty with 754 pre-service teachers. They found that attitude towards using computers and perceived usefulness directly affected the intention of using computer. Another finding of the study was that participants were likely to develop positive attitudes and use technology when technology was easier to handle. Furthermore Hismanoglu (2012) tried to find out pre-service EFL teachers' understandings of ICT integration in distance education system. He reported that although pre-service teachers had negative attitudes towards the integration of ICT and did not use ICT in the classroom, they considered ICT as a useful tool that help them learn many things. He also revealed that the reasons of negative attitudes of the participants were lack of exposure to ICT, lack of opportunities of trying ICT use, exam-driven system, inadequate training and lack of competent.

In her article "Elementary School Teachers and Teaching with Technology" Varol (2013) tried to determine the relationship between ICT engagement of elementary

school teachers and their technology attitudes. She found that ICT knowledge and usage of the teachers were very low and their attitudes were at medium level. Teachers were found to use the Internet mainly for educational CDs, text processing programs, e-mail and software to create presentations. Recently, Bozdogan and Ozen (2014) tried to determine the level and frequency of the use of ICT and factors influencing pre-service ELT teachers perceived self-efficacy levels. They found that most of the participants stated high levels of self-efficacy in using ICT. Another result of the study was that whereas experience, confidence and perceived use of computers positively influenced ICT self-efficacy, lack of confidence, technical problems and lack of knowledge and skills negatively influenced the ICT self-efficacy of the participants. According to the study, while the most widely used devices were mobile phone, USB flash drive and notebook, the most widely used ICT tools were web browsers, SMS, music programs and video player programs. . In another recent study Merc (2015) carried out a study to examine the pre-service teachers' technology use in their practice teaching experiences. He found that pre-service teachers expressed that ICT were useful in EFL classroom practice. However practicum schools were found to be inadequate in terms of supplying teachers with required ICT tools and thus pre-service teachers could not be able to leverage ICT tools in their classroom practices at a fulfilling and desired level

CHAPTER THREE

3. METHODOLOGY

3.1. Introduction

EFL Teachers' use of ICT in the classroom practice is very essential in order to successfully integrate ICT into curriculum as teachers are the real practitioners of the curriculum. In the present study it is aimed to present a general picture of latest ICT environment in Artvin, to investigate ICT usage of EFL Teachers in their classroom practice and to determine the factors influencing EFL Teachers use of ICT in their classroom practice. A questionnaire of 103 EFL teachers and follow up semi structured interviews of 10 EFL teachers were used in order to collect data. Methodology of this study is addressed in this chapter. The method of the study, the participants of the study, the instruments used for data collection, procedure of data collection and data analysis are explained successively.

3.2. Method

Mixed methods research was carried out in this study in order to obtain required data. According to Johnson and Onwuegbuzie (2004) mixed methods research can be defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (p.17). In a recent definition Creswell (2012) defines mixed methods research design as "a procedure for collecting, analysing, and mixing both quantitative and qualitative methods in a single study or a series of studies to understand a research problem" (p.535). Such features of both quantitative and qualitative methods as viewpoints, inference techniques, data analysis and data collection instruments may be combined in mixed methods research. Triangulation, completeness, counterbalancing weaknesses and providing more powerful inferences, answering different research question, explanation of findings, illustration of data, hypothesis development and

testing and instrumental development and testing are considered as the main rationales for using the mixed methods research (Doyle, Brady & Byrne, 2009). Although both quantitative and qualitative research methods are important designs, they have some weaknesses. The weaknesses of quantitative and qualitative research designs are identified by Johnson and Onweugbuzie (2004) as followings:

Weaknesses of quantitative research;

- Categories of the researchers that are used may not reflect understandings of the local constituencies
- Theories of the researchers that are used might not reflect understandings of the local constituencies
- The researcher may leave out on phenomena that are occurring because of the focus on theory or testing of hypothesis rather than on theory or generation of hypothesis
- Knowledge which was produced might be too general and abstract for direct application to contexts, specific local situations and individuals (p.19).

Weaknesses of qualitative research;

- Knowledge which was produced might not generalise to other settings or other people
- Making quantitative predictions is difficult
- Testing hypotheses and theories is more difficult
- It might have inferior credibility with some commissioners and administrations of programs
- When compared to quantitative research it generally requires more time to collect the data
- Analysis of data is often time-consuming
- The researcher's personal biases and idiosyncrasies more easily influence the results (p.20).

Using mixed methods research is an effective way to overcome some of the weaknesses of these two methods. Similar to any other research method, mixed methods research has some disadvantages and limitations such as cost, time, being challenging

and requirement of multiple researchers. Nevertheless these limitations are related to the use of mixed methods research and thus they do not influence validity and credibility of the research. Therefore the main reasons for using mixed methods research in this study are to eliminate the weaknesses of quantitative and qualitative methods and to provide greater validity by triangulation. Taking these benefits into consideration mixed methods research is used in this study.

3.3. Participants of the Study

3.3.1. Participants of the Questionnaire

According to the data from Ministry of National Education Artvin Provincial Office (www.artvin.meb.gov.tr) there are 185 EFL teachers working in the province of Artvin. Therefore the population of the present study consists of all EFL Teachers who work in Artvin and its towns in 2014-2015 spring academic semester. The sample of this study is 103 EFL teachers working different towns and different schools in Artvin province. As the one of the aims of this study is to provide a general picture of ICT environment questionnaires were distributed to each EFL teachers and 103 questionnaires were completed end returned. The demographic features of participants are presented in Table 3.1.

As it consists important variables such as age, gender, teaching experience and school location which may influence the use of ICT, demographic features of the participants is presented in detail. Demographic features of the participants can be seen in Table .. With respect to gender of the participants, %61,2 of the participants were female and %38,8 of the participants were male. The age of the participants is presented in four categories which are 20-25, 26-35, 36-45 and 46-55.

The majority of the participants (%55,3) are between 26-35 years old %28,2 of the participant are between 20-25 years old, %9,7 of the participants are between 36-45 years old and %6,8 of the participants are between 46-55 years old. As for education level, %87,4 of the participants have Bachelor’s Degree and %11,7 of the participants have Master’s Degree.

Another feature of the participants is their teaching experience. %55,3 of the participants have 1-5 years of teaching experience, %24,3 of the participants have 6-10 years of teaching experience, %15,5 of the participants have 11-20 years of teaching experience and %4,9 of the participants have 21-30 years of teaching experience. With regard to school levels results showed close percentages. %29,1 of the participants work in primary schools, %31 of the participants work in secondary schools and %39,8 of the participants work in high schools.

Table 3.1.

Demographic Features of the Participants

		F	%
Gender	Female	63	61,2
	Male	40	38,8
Age	20-25	29	28,2
	26-35	57	55,3
	36-45	10	9,7
	46-55	7	6,8
Education	Bachelor's Degree	90	87,4
	Master's Degree	13	11,7
Teaching Experience	1-5 years	57	55,3
	6-10 years	25	24,3
	11-20 years	16	15,5
	21-30 years	5	4,9
Level of School	Primary School	30	29,1
	Secondary School	32	31,1
	High School	41	39,8
Average Number of Students	Less than 15	29	28,2
	16-20	24	23,3
	21-30	31	30,1
	30+	19	18,4
Number of EFL Teachers in School	1	38	36,9
	2-4	61	59,2
	5-7	4	3.9
Location of the School	Rural	38	36,9
	Town	65	63,1

Class size is also another characteristic. %28,2 of the participants expressed that their average classroom size is less than 15 students, %23,3 of the participants stated that average number of students in their classroom is between 16-20, %30,1 of the participants reported that the number of the students in their classrooms is between 21-30 and 18,4 of the participants expressed that they had classrooms with more than 30 students.

Over the half of the participants (%59,2) expressed that there were 2-4 EFL teachers in their schools. %38 of the participants stated that they were the only EFL teacher in their schools whereas %3,9 of them said that there were 5-7 EFL teachers in their schools. Last feature demographic feature is the location of school. While %36,9 of the participants worked in rural part, %63,1 of them worked in town.

3.3.2. Participants of the Interview

After the questionnaire semi-constructed interviews were conducted with 10 EFL Teachers who had participated in the questionnaire. All teachers who completed the questionnaire were given opportunity of taking part in the interviews. These 10 EFL teachers were selected among the volunteers. While choosing the participants for the interviews, it was aimed to constitute a representative sample of the population. The rationale of the selection based on the idea that selection should ensure an objective perspective that would strengthen the reliability of the study. For that reason participants were selected considering four criteria which are school type, gender, age and school location. 3 of the participants were selected among primary school EFL teachers, another 3 of the participants were selected among secondary school EFL teachers and 4 of the participants were selected among high school EFL teachers. Of the 10 subjects who participated in the interviews, 4 EFL teachers were male whereas 6 EFL teachers were female. 3 of the participants were between 20-25 years old, 5 participants were between 26-35 years old and 2 participants were between 36-45 years old. Finally 5 of the participants worked in rural schools whereas 6 of the participants worked in schools which were in town. Table 3.2 shows detailed background information of the subjects of the interviews.

Table 3.2.

Background Information of the Subjects Participating in Interview

	Gender		Age			School Location	
	Male	Female	20-25	26-35	36-45	Rural	Town
Primary School	1	2	1	1	1	1	2
Secondary School	1	2	1	2		1	2
High School	2	2	1	2	1	2	2
Total	4	6	3	5	2	5	6

3.4. Instruments

3.4.1 The Questionnaire

Questionnaires are quantitative data collection tools and can be defined as a set of questions to gather information from individuals. Questionnaires are used when information about participants' beliefs, attitudes, behaviours, feelings and values are tried to be found. Using questionnaire is relatively cheap, efficient and quick way of gathering information from a large amount of individuals. The aim of this study is to find out ICT environment in Artvin, the ICT skills of EFL teachers and the factors influencing EFL teachers' use of ICT and in order to collect related quantitative data a questionnaire was used.

The questionnaire used in this study had been used in Li Li and Steve Walsh's study (2010) "Technology uptake in Chinese EFL classes". Li Li and Steve Walsh used Li's questionnaire (2008) in their study. In order to develop adequacy of the questionnaire, the questions of the questionnaire were adapted into Turkish context. The questionnaire of the present study consisted of five main parts:

You and your teaching experience was the first part of the questionnaire. Participants were asked to answer questions related to their background information in this part. The questions included personal information of the participants and information about their teaching experience, academic background, school location and school level.

ICT environment was the second part of the questionnaire. Participants were asked to answer questions related the ICT environment in their teachers' rooms, schools and classrooms. The questions included the access to computer and the Internet in teachers' room and classroom, the number of computers in their access and the frequency of their computer use in classroom practice.

ICT skill and ICT practice was the third part of the questionnaire. Participants were asked to answer questions about their ICT competency, ICT confidence, ICT training level and ICT courses. The questions included the interest of teachers in improving their ICT knowledge and the focus of training they received.

ICT use was the four and main part of the questionnaire. In this part, participants were asked to answer questions related their ICT opinions, attitudes, expectations and classroom practices of ICT as teachers. The questions included whether they had any kind of ICT certificate, if they used ICT in their classroom practice or not, reasons for ICT use, motivating factors of ICT use and preventing factors of ICT use.

Other Comments was the last part of the questionnaire. Participants were asked to make further comments in this part. Those who were interested in interviews were given opportunity of taking part in the interviews in this part.

In sum, there were five parts of the questionnaire focusing on ICT environment, ICT skills and ICT use of EFL Teachers. As the aim of the present study is to provide an overall picture of ICT use among EFL teachers in Artvin, the questionnaire dealt with the research questions well by providing five parts related to ICT environment, ICT skills and training and ICT use. The questionnaire is also presented in Appendix A.

3.4.2. The Interview

The interviews which were the second instrument used in this study were conducted with 10 EFL teachers who had participated and volunteered in the questionnaire. According to McNamara (1999) interviews are especially useful when a researcher wants to find the story behind the participants' experience and may be used as follow up to participants of questionnaires to investigate their responds. Furthermore Gray (2004) stated followings as the reasons for using interviews as research instruments: the possibility of achieving highly personalised data, opportunities required

for a thorough investigation, the possibility of a high return rate and the opportunity for participants who are not fluent speaker of the language and experience difficulties in written language to express themselves.

Considering these benefits of this qualitative data collection tool, the interview technique was used in order to support the data gathered from the questionnaire with the stories behind the experiences. Moreover one of the concerns of this study is to determine factors affecting EFL teachers' use of ICT in their classroom practices, for this reason interview seemed necessary to probe the classroom experience of teachers.

Interviews may be placed on a continuous sequence of structure from unstructured to structured and the main idea of the continuum depend on the level of interviewer's control over the interaction (Harrell & Bradley, 2009). Basically there are three kinds of interviews: unstructured, semi-structured and structured. Dunn (2005) states that there are prearranged and standardised set of questions to be followed in structured interview whereas the conversation in unstructured interviews is directed by the informant instead of a list of questions. He places semi-structured interviews in the middle of structured and unstructured interviews by adding that there are both prearranged set of questions and the flexibility in addressing of the issues by the informant. Newton (2010) also emphasizes the similarity of unstructured interview with observation and structured interview with questionnaire. As the aim of doing the interview is to explore the EFL teachers' opinions and perceptions towards ICT and to investigate their experience without limiting the participants in the scope of context, the semi-structured interview was considered as the most appropriate type of interview technique in this study.

The interview originally consisted of 8 questions; however some extra questions were also addressed to interviewees in the course of the interview sessions. Open-ended questions were preferred in the interviews. The questions were associated with EFL teachers' reflections upon their ICT experiences, benefits of ICT not only for teachers but also for learners, desired support, related problems, reasons for their choices about using ICT and their attitudes towards integrating ICT into their classroom practice.

3.5. Data Collection Procedure

Both quantitative and qualitative data collection tools were used in this study. Data was collected during 2014-2015 academic year seminar sessions since all teachers have to attend these seminars. Before data collection, Artvin Provincial Directorate of National Education was contacted and necessary permission for carrying out the present study in Artvin was granted. As the study comprised all the towns in Artvin province, help as to distribution and collection of questionnaires was demanded from local authorities.

According to the official website of Artvin Provincial Directorate of National Education (www.artvin.meb.gov.tr) there were 185 EFL teachers working in Artvin at the time of application. Although the schools which were at the town centres were visited and EFL teachers were asked to fill the questionnaire, questionnaires were sent via e-mail to the schools in rural parts with help of local authorities. Questionnaires were also mailed to teachers who were attending the seminars in different province. Consequently, questionnaires were distributed to all EFL teachers working in Artvin. In order to increase the validity and reliability of the study all of the teachers were contacted and informed about the study. Of the 185 questionnaires distributed, 103 questionnaires (%56,6) were filled and returned.

After the questionnaires had been collected, the second stage of the data collection process began. 10 EFL teachers were selected among those who declared interest in taking part in interviews. The selection procedure was conducted carefully in order to constitute a typical sample of the population. The detailed information about the participants of the interviews was mentioned in previous sections. Standard ethical procedures were followed during the interviews. All of the participants were informed about the study and their oral consent was granted and recorded during the sessions. Moreover, participants were given option to suspend their involvement in the interview at any time. Average duration of the interviews was 10-15 minutes. In order to avoid possible misunderstandings, decrease anxiety of speaking in a foreign language and get more valid data, the interviews were conducted in Turkish which is the native language of the participants. The interviews were recorded by a voice recording application downloaded to smart phone.

Following the completion of the interviews, recordings were listened and transcribed. The researcher also translated the transcriptions of the interviews into English. Translations of the transcriptions were proofread by two colleagues in order to see whether any inconsistencies exist between the translated and original texts.

3.6. Data Analysis

3.6.1. Analysis of the Quantitative Data

The quantitative data collected through questionnaires were analysed using Statistical Package for the Social Sciences (SPSS) program. The version of SPSS 17.0 for Windows was used. General descriptives such as percentages and frequency were measured. In order to compare ICT use with some variables including age, gender, school type and school location chi square tests were performed.

3.6.2. Analysis of the Qualitative Data

Content analysis procedure was followed in the analysis of qualitative data. In this study the source of qualitative data was interview. The interviews were recorded, transcribed and translated cautiously. The data obtained were read several times by the researcher. The semi-constructed interviews were coded in four categories which were the same as in the questionnaire: ICT environment, the use of ICT in classroom practice, attitudes towards ICT use in classroom practice and factors affecting using ICT in classroom practice. Then, the responses of the participants were grouped and similar arguments and statements were listed in the related category. It was thought that the presentation of data obtained from interviews could be more appropriate and clear with this procedure.

CHAPTER FOUR

4. RESULTS AND DISCUSSION

4.1. Introduction

The purpose of this study was to provide a general picture of the current ICT environment in schools in Artvin, examine ICT use of EFL teachers in their classroom practice and determine the factors affecting their ICT use. For this reason, a questionnaire was handed to EFL teachers working in Artvin and then interviews were conducted in order to collect data. As a result both quantitative and qualitative data were collected. Firstly the results of quantitative and then the results of qualitative data will be presented in this chapter. In addition findings are discussed by addressing previous studies. The data were analysed under 6 headings: the current ICT environment in Artvin, ICT skills and training of EFL teachers, current computer use in EFL classrooms, factors preventing ICT use of EFL teachers in classroom practice, factors motivating EFL teachers to use computers, areas EFL teachers wanted to be supported for using computer.

4.2. The Current ICT Environment in Artvin

Second part of the questionnaire was related with the current ICT environment in Artvin. The EFL teachers participating in the present study were asked to reply the questions about current ICT environment in their schools. The questions were addressed to describe three sections of EFL teachers ICT environment: Teachers' Room, Classroom and School. The summary of ICT environment in Artvin can be seen in Table 4.1.

In the first item of the second part participants were asked whether they have a computer and Internet connection in Teachers' Room in their schools. Of all the participants, 76 (%73,8) said that they have a computer in their Teachers' Room

whereas 27 (%26,2) said that they don't have a computer in their Teachers' Room. 73 of the participants (%70,9) expressed that they have internet connection in their Teachers' Room and 30 of the participants (%29,1) expressed that they don't have internet connection in their Teachers' Room.

Table 4.1.

ICT Environment in Artvin

		Yes		No	
		F	%	F	%
Teacher's Room	Computer	76	73,8	27	26,2
	Internet Connection	73	70,9	30	29,1
Classroom	Computer	53	51,5	50	48,5
	Internet Connection	43	81,1	10	18,9
Computer Classroom		48	46,6	55	53,4
Internet Access in Computer Classroom		39	81,3	9	18,7
Are English Teachers free to use Computer Classroom?		26	54,2	22	45,8

In the second item of the second part, participants –this time- were asked if they have computer and internet connection in their classrooms. The number of the participants saying that they have a computer in their classroom was 53 (%51,5) whereas the number of those saying that they don't have a computer in their classroom was 50 (%48,5). When the Internet connection in classroom having a computer was examined, it is found that 43 of the classrooms (%81,1) have internet connection while 10 of the classrooms (%18,9) do not have internet connection.

In the fourth item of the second part, participants were asked whether they have computer classroom in their school, internet connection in the computer classroom, free access to computer classroom and they were also asked how many computers are there in their computer classrooms. According to the result, 48 of the participants (%46,6) stated that they have a computer classroom in their school and 55 of the participants (%53,4) stated that they don't have a computer classroom in their schools. When the internet connection in these computer classrooms were examined, it was revealed that the number of computer classroom having internet connection was 39 (%81,3) and the number of computer classroom not having internet connection is 9 (%18,7).

The number computers in computer classrooms is presented in Table 4.2. 7 of the participants (%14,6) said that there are 1-9 computers in their computer classrooms. 21 of the participants (43,8) stated that the number of computers in their computer classrooms changes between 10 and 19. 13 of the participants (%27) said that they had 20-29 computers in their computer classroom and 7 of the participants stated that there were more than 30 computers in their computer classrooms. Finally 26 of the participants (54,2) stated that they can use computer classrooms whenever they want whereas 22 of the participants (%45,8) stated that they were not free to use computer classrooms.

Table 4.2.

The Number of Computers in Computer Classrooms

		F	N
Number of Computers in the Computer Classroom	1-9	7	14,6
	10-19	21	43,8
	20-29	13	27
	30+	7	14,6

Considering the importance MNE puts on ICT, the number of the classroom having computer and the number of computer classrooms are relatively low. One reason of this situation may be lack of budget in schools. As the schools have limited budget, they may not equip every classroom with a computer. Especially primary schools and secondary schools do not have a budget of their own. They are depended on District Offices of MNE and district offices cover these schools expenses. Another reason is that installation of interactive whiteboards and other ICT tools within the scope of FATIH Project is still been maintaining. When the installation of interactive whiteboards is completed, the numbers of ICT tools in schools will be improved.

These data and assumptions are also supported by qualitative data results. According to analysis of the interviews, most of the teachers think that their schools are insufficient in terms of ICT tools. When the interviewees were asked what they think about the integration of the computers in their schools, they complained about the ICT environment in their schools. Participants argued that there was a lack of hardware such as computers and projection devices in their schools. Participants described their schools' ICT environment as follows:

> *"First of all we don't have a computer classroom and information technologies teacher. I don't have a classroom like computer classroom for language activities. There are projection devices but computers are broken down and only one of the stereo set is working. There is one smart board only in one classroom but just audio feature of it can be used. In short there are always some troubles."* (Interviewee 3)

> *"Only school management, Information Technologies teacher and officers have computers in our school. On the other hand there is only one computer that we can access. This is insufficient for our school which has 40 teachers."* (Interviewee 9)

They also stated that the computers in classrooms are old and therefore they had some difficulties in using the computers in the classroom. Another issue addressed by the participants is that the internet connection in classrooms was very weak. Besides they thought that the internet filter MNE applies in schools was very strict. They stated that they cannot access to some useful sites because of the filter of MNE. The following statements may exemplify the situation:

> *"I think it is highly insufficient. There is only one computer in classrooms and the internet connection is very weak. The computers are old in terms of technology so sometimes we face with some difficulties. Especially restrictions and Internet filter of MNE prevent us from visiting some useful web sites."* (Interviewee 1)

> *"I think it is not sufficient. I work in a village school. The computers are old so other teachers also don't use computers. Generally I use my own computer."* (Interviewee 5)

> *"We can access a lot of educational sites including websites of MNE and others. But unfortunately some international sites and content sharing sites such as YouTube cannot be accessed because of the filter of MNE. This may be trouble sometimes. Especially restriction of YouTube is a big trouble."* (Interviewee 8)

> *There are lots of programs and websites such as social media and blogs that facilitate language teaching and learning. Unfortunately these websites are blocked by MNE.* (Interviewee 10)

According to data there was a lack of computer classrooms and lack of access to computer classrooms in the schools. Participants stated that there was not a computer classroom in their schools. And participants who said that they had computer classrooms stated that they could not use computer classrooms as much as they desired. They expressed their thoughts as followings:

> *"Unfortunately there isn't a computer class that students can use. For example an online examination was carried out in our school and school management requested teachers to bring their own computers for the examination."* (Interviewee 9)

> *"I haven't done any activities in computer classroom environment so far. There is only one computer classroom and our school is crowded so it can only be used for computer lessons. This is the situation."* (Interviewee 6)

> "*There is only one computer classroom and it is in information technologies teacher's use. We use it only if there is no lesson in computer classroom."* (Interviewee 2)

Installation of interactive whiteboards was completed in some schools. Participants argued that they faced some technical problems as the system was completely new to them and they needed time to use them effectively. Participant 4 reported this as followings:

> *Interactive whiteboards have already been installed but some technical problems have occurred. So we have some problems with them. But we are trying to use them as efficiently as possible. Obviously, this system is new for our school so I don't think that my school is efficient. There are lots of things to improve.* (Interviewee 4).

Finally, participants mentioned about lack of budget as an obstacle. They stated that their school budget was limited and thus their school could not buy any ICT tools. One of the participants described this situation as follows:

> *I think it is quite insufficient. Unfortunately there aren't any computers to be used in our school except school management's computers. Besides as there is a lack of projection devices, we cannot use technology in our classroom practice actively. The Internet connection usually disconnects. As there isn't enough budget we cannot buy technologic devices.* (Interviewee 10)

Only one of the participants stated that the integration of computers in his or her school is sufficient. He or she described the ICT environment in his or her school as follows:

> *Actually we are good at integration. There are interactive whiteboards in every classroom. Also we have a small computer class. Internet connection is also provided in classrooms via interactive whiteboards.* (Interviewee 8)

Having required hardware is a precondition for the use of ICT in classroom practice. According to the results of both qualitative and quantitative data, the ICT integration in Artvin was found to be insufficient. Participants reported that there was a serious lack of computer in schools and almost half of the participants mentioned about lack computer classroom and access to computer classrooms. Therefore it can be concluded that classrooms in Artvin is not well equipped to use ICT in classroom practice.

4.3. The ICT Skills and ICT Training of the EFL Teachers

As having required knowledge and abilities may be an important factor in using ICT, the questionnaire consisted of questions related to EFL teachers' ICT skills, the training they had received and the ICT confidence and competence levels of EFL teachers. Part 3 in the questionnaire focused on the ICT training and skills whereas items 5 and 6 in Part 4 dealt with ICT competence and confidence levels of EFL teachers.

Firstly participants were asked whether they had received any training on ICT or not. Having training on ICT important as lack of required training decreases the enthusiasm of teachers towards using ICT in their classroom practice (Hu & McGrath, 2012) Participants had three options as: “Yes”, “No” and “Can’t Remember” and of which they were supposed to choose only one option. The number of the participants who stated that they had received ICT training was 60 (%58,3). 28 of the participants (%27,2) stated that they had not received any kind of ICT training and 15 of the participants (%14,6) reported that they could not remember whether they had received ICT training or not. Table 4.3 presents the data related to ICT training of the EFL teachers.

Table 4.3.

ICT Training

	F	%
Teachers with ICT Training	60	58,3
Teachers without ICT Training	28	27,2
Can’t Remember	15	14,6

In the second item of Part III, participants were asked whether they were interested in developing their skills and knowledge in ICT. This item was important to determine the openness and desire of EFL teachers to learning about technology. The results are shown in Table 4.4 While 85 of the participants (%82,5) stated that they were interested in developing their skills and knowledge in ICT, 18 of the participants (%17,5) showed no interest in developing their skills and knowledge in ICT. This finding shows that EFL teachers in Artvin are open to learn more about technology which may help them use technology in their classroom practice.

Table 4.4.

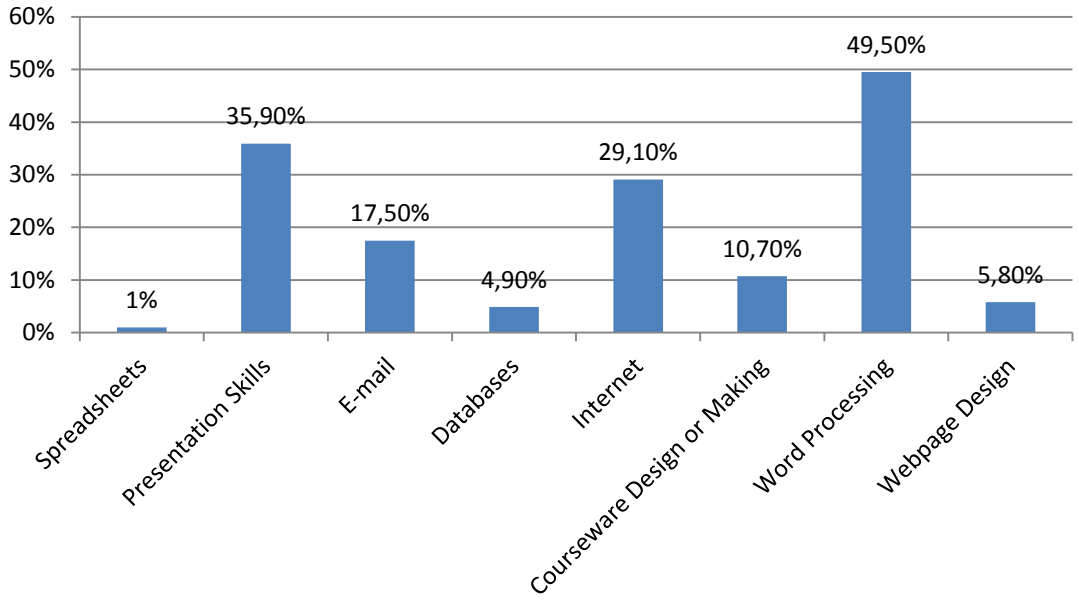
The interest of the Participants in developing theirselves in ICT

	F	%
Teachers having interest	85	82,5
Teachers not having interest	18	17,5

In the last item of Part III, participants who stated that they had received training in ICT were asked about the focus of their trainings. There were 9 options and the participants had the freedom to choose all the options that apply. The options were "Word Processing", "Presentation Skills", "E-Mail", "Databases", "Internet", Courseware Design or Making", "Spreadsheets", "Webpage Design" and "Others". The results are presented in Table 4.5. When the results are examined it is found that almost half of the participants (%49,5) had received training in word processing; %35,9 of the participants had received training in presentation skills; % 29,1 of the participants had received training in Internet, %17,5 of the participants had received training in E-mail, %10,7 of the participants had received training in courseware design or making, %5,8 of the participants had received training in webpage design and %1 of the participants had received training in spreadsheets. The focus of the training EFL teachers had received is also presented in Table x.

Table 4.5.

The focus of training EFL teachers in Artvin had received



When results are examined it can be seen that the focus of ICT training EFL teachers in Artvin had received was mainly on technology skills. They had been trained to improve their technological skills instead of pedagogical skills. Although having training in technology skills may help teachers use computers more efficiently in

classroom practice, having training in integration of computers into teaching may help them better as it will contribute to developing pedagogical skills which are related to integrating ICT.

As ICT competence is believed to be a requirement for using ICT in classroom practice (Drent & Meelisen, 2008) the ICT competence levels of EFL teachers in Artvin who stated that they used computers in the classroom practice (n:79) were also questioned in the fifth item of Part IV. Participants were asked about their competence level in four aspects: "Classroom Practice", "Professional Development", "Personal Use" and "Administration". The participants were supposed to choose one of the four options which are: "Very Competent", "Competent", "Not Competent" and "Unsure". The results of EFL teachers' ICT competence levels can be seen in Table 4.6.

Table 4.6.

ICT Competence Level of EFL Teachers in Artvin

		F	%
Classroom Practice	Very Competent	20	25,3
	Competent	49	62
	Not Competent	7	8,9
	Unsure	3	3,8
Professional Development	Very Competent	16	20,2
	Competent	40	50,6
	Not Competent	19	24
	Unsure	4	5,2
Personal Use	Very Competent	28	35,4
	Competent	44	55,7
	Not Competent	6	7,6
	Unsure	1	1,3
Administration	Very Competent	12	15,2
	Competent	34	43
	Not Competent	22	27,9
	Unsure	11	13,9

When asked about their ICT competence level in classroom practice, 20 of the participants (%25,3) stated that they were "Very Competent" in ICT; 49 of the participants (%62) expressed that they were "Competent" in ICT; 7 of the participants (%8,9) reported that they were "Not Competent" in ICT and 3 of the participants said that they were "Unsure" about their ICT competence in classroom practice. In the light

of this data it can be said that majority of the participants (%87,3) consider themselves competent and very competent in ICT in classroom practice.

ICT competence level of EFL teachers in Artvin in professional development was also asked. The number or the participants who said that they were “Very Competent” was 16 (%20,2); the number of the participants who stated that they were “Competent” was 40 (%50,6); the number of the participants who expressed that they were “Not Competent” was 19 (%24) and the number of the participants who reported that they were “Unsure” about their ICT competence level was 4 (5,2). It is clear that most of the participants (70,8) think that they are competent and very competent in using ICT for professional development.

Another aspect of ICT competence level of EFL teachers in Artvin was personal use. 28 of the participants (%35,4) said that they were “Very Competent”; 44 of the participants (%55,7) stated that they were “Competent”; 6 of the participants (%7,6) expressed that they were “Not Competent” and one of the participants (%1,3) stated that he or she were “Unsure” about his or her competence level. It can be concluded that a great majority of the participants (%90,1) think that they are competent and very competent in using ICT for personal use. Compared to other aspects, ICT competence level for personal use has the highest percentage.

The last aspect of ICT competence level of EFL teachers in Artvin was administration. Of the all participants who answered this question 12 (%15,2) stated that they were “Very Competent”; 34 (%43) expressed that they were “Competent”; 22 (27,9) said that they were “Not Competent” and 11 reported that they were “Unsure” about their competence level. Although %58,2 of the participant stated that they were competent and very competent in using ICT for administration this is relatively low compared to other aspects of competence levels.,

After The ICT competence levels, ICT confidence levels of EFL teachers in Artvin stating that they used computers in the classroom practice (n:79) were investigated in the sixth item of Part IV. The aspects of confidence levels were the same of the aspects used in determining ICT competence levels of teachers. The results of EFL teachers’ ICT confidence levels can be seen in Table 4.7.

Table 4.7.

ICT Confidence Levels of EFL Teachers in Artvin

		F	%
Classroom Practice	Very Confident	25	31,7
	Confident	43	54,4
	Not Confident	10	12,6
	Unsure	1	1.3
Professional Development	Very Confident	16	20,3
	Confident	46	58,2
	Not Confident	14	17,7
	Unsure	3	3,8
Personal Use	Very Confident	28	35,4
	Confident	42	53,2
	Not Confident	8	10,1
	Unsure	1	1,3
Administration	Very Confident	13	16,5
	Confident	35	44,3
	Not Confident	22	27,8
	Unsure	9	11,4

In the first aspect ICT confidence level of EFL teachers in classroom practice was questioned. Of the all participants who answered this question, 25 (%31,7)said that they were “Very Confident”, 43 (%54,4) stated that they were “Confident”, 10 (%12,6) reported that they were “Not Confident” and 1 (%1,3) expressed that he or she was “Unsure” about his or her confidence level. It can be said that the majority of the participants (%86,1) considered themselves confident and very confident in using ICT for classroom practice. The results are consistent with competence levels in which %87,2 of the EFL teachers considered themselves competent and very competent.

ICT confidence level of EFL teachers in professional development was another aspect that was investigated. The number of EFL teachers who said that they were “Very Competent” was 16 (%20,3); the number of the participants who expressed that they were “Competent” was 46 (58,2); the number of the participants who stated that they were “Not Competent” was 14 (%17,7) and the number of the participants who reported that they were “Unsure” about their confidence levels was 3 (%3,8). It can be concluded that majority of the participants (%78,5) considered themselves confident and very confident in using ICT for professional development. Compared to ICT competence level of the same aspect which was %70,8, the percentage of the confidence level is found to be higher.

ICT confidence level of EFL teachers in personal use was the third aspect which was investigated. 28 of the participants (%35,4) expressed that they were “Very Confident”; 42 of the participants (%53,2) said that they were “Confident”; 8 of the participants (%10,1) stated that they were “Not Confident” and 1 of the participants reported that he or she was “Unsure” about his or her confident level. It is clear that a great majority of the participants (%88,6) considered themselves as confident and very confident in using ICT for personal use. Compared to the competence level of the same aspect which was, the result were found to be very similar. In other words the more the participants had confidence in their use of ICT, the more competent they were.

The last aspect that was questioned was the ICT confidence level of EFL teachers in administration. 13 of the participants (%16,5) stated that they were “Very Confident”; 35 of the participants (%44,3) reported that they were “Confident”; 22 of the participants (%27,8) said that they were “Not Competent” and 9 of the participants expressed (%11,4) that they were “Unsure” about their competence level. It can be concluded that although more than half of the participants (%60,8) considered themselves as confident and very confident, the percentage is relatively low compared to other aspects. Compared to the competency level of the same aspect, the percentage of the participants who stated that they were competent and very competent is higher.

When the results are examined, it can be seen that ICT competence and confidence levels of EFL teachers in Artvin are similar. In other words participants who stated confidence in using ICT also expressed that they were competent. This finding of the study is supported by the findings of Prestridge (2012) who found that teachers having high levels of competency also reported more confidence in ICT. It can also be seen that the number of the participants who stated competence and confidence in using ICT is very high. Of four aspects, personal use was found to have the highest and administration was found to have the lowest percentages in both confidence and competence levels.

As the aim of this study is to investigate EFL teachers’ ICT use in classroom practice, the aspect of classroom practice has importance. Only %8,9 of the participants stated that they were not competent and %12,6 of the participants said that they were not confident in using ICT in classroom practice. This result indicates that EFL teachers

have both confidence and competence in using ICT in classroom practice. Besides results also indicate that the participants know how to integrate ICT in their classroom practice as confidence and competence levels are related to knowing how to integrate ICT tools in their classroom practice.

In order to reveal the participants understandings of competence and confidence in using ICT and investigate more deeply, the participants were asked what skills and ability are required to manage to use ICT in classroom practice in the interview. Most of the participants stated that using technology in classroom is not demanding and does not require a higher level of skills and ability. Nevertheless they suggested that an EFL teacher should be at least information technologies literate in order to use ICT in their teaching efficiently. One of the participants supported this idea as followings:

> *I think it doesn't require a higher level of skill and ability. They should be familiar with and use the websites related to their field and they should use PowerPoint. Actually these are enough most of the time.* (Interviewee 5)

According to participants, having basic skills of computer technology and being familiar with computers are enough for using computers in classroom practice. Participants thought that using basic programs such as Word and PowerPoint, using the Internet and knowing how to download were enough most of the time. They stated that:

> *I don't think it requires a high level of ability. But teachers should have at least basic level skills and ability to use computers in classroom environment.* (Interviewee 7)

> *I don't think it is necessary to follow technology step by step for an effective computer use in the classroom. I think basic computer skills are enough for using computers in classroom practice.* (Interviewee 9)

> *I think it doesn't require a high level of ability. They should know how to use computer, the Internet, CDs, how to write CDs and how to download something in the Internet. Of course if they want to do some extra things they have to know much.* (Interviewee 3)

> *I think teachers should have some basic skills and ability such as reading writing or how to use Word as well as downloading or using some programs. They should use the Internet efficiently for example what are there in websites or what can be used what can be more beneficial. I think teachers should be quite familiar with computers.* (Interviewee 1)

> *There is a lot of software about teaching language and we must be up to date. You don't have to be very Professional. An average of knowledge about technology is enough to use it in the classroom efficiently. It is very easy to find authentic materials about our subject.* (Interviewee 4)

The participants also mentioned about the popularity of ICT tools. They stated that ICT tools had become integral parts of our daily lives and thus most of the teachers had already known how to handle with these devices. This facilitates the use of ICT in classroom practice. Some participants noted that younger teachers had more comprehensive knowledge about ICT tools and were better at using computer than older teachers. The following extracts explain these statements:

> *First of all basic skills and ability of technology is essential. Nowadays there are hardly any teachers who don't have basic skill of computer. Basic skills are enough for computer.* (Interviewee 8)

> *As computers are integral parts our daily lives, I don't think that we need a high level of computer literacy in order to use computers in classroom practice. We already use technological devices in all parts of our lives. Especially younger teachers have comprehensive knowledge.* (Interviewee 10)

> *There aren't any teachers who don't use computers in today's world. So if they exert themselves a little they can attain required ability and skills.* (Interviewee 6)

Some of the participants emphasized the importance of openness of EFL teachers to change. They said that teachers should be open to technology and learning and hold positive attitudes towards ICT for an effective use of technology in classroom practice. Two of the participants expressed their thoughts as following:

> *First of all teachers should be open to changes. If teachers have a negative attitude towards computers and technology, they won't enjoy no matter how much they try to use technology in classroom. Therefore they won't use technology efficiently. Teachers having positive attitudes, on the other hand, will enjoy what they do and use technology efficiently*. (Interviewee 7)

> *In addition teachers should be open to learning and improving theirselves. Moreover teachers should have their students understand that computers in classrooms are educational tools- not means of joy*. (Interviewee 9)

The importance of training was the last topic stressed by the participants. They stated that although teachers had basic skills of computer teachers should be trained in order to use more complex technological devices such as interactive whiteboards. Technical knowledge of the devices was also mentioned by the participants. They stated that teachers should have technical knowledge in order to manage with devices in their classrooms. They supported the need of training by saying:

> "*For teachers skills and ability not high levels of but over intermediate level is required because it is very hard to prepare a lesson and provide fluency in lessons. And it is more difficult in a technologic environment."* (Interviewee 2)

> "*Technical features are very important. We must know how to use the devices in the classroom and it is very important that whether we have prejudice or not."* (Interviewee 4)

> "*First of all teachers should be trained. We have to be sure that teachers are trained and use technology very well."* (Interviewee 6)

> "*In addition they can attend some special courses or training related to technology and computers or they can improve their skills on their own in their free time. This would contribute to that person's computer ability and skills."* (Interviewee 7)

> "*But interactive whiteboards which were installed within the FATIH Project has some different features. So in order to use interactive boards efficiently I think training is necessary*". (Interviewee 8)

> "*It may benefit to know the connections of technological devices and short links on the Internet in order to save time.*" (Interviewee 10)

In sum, when quantitative data of ICT skills and training of EFL teachers in Artvin is examined, it can be seen that more than half of the participants (%58,3) received ICT training and this training was mainly focused on technology skills such as word processing and presentation skills rather than pedagogical training. %85 of the participants stated that they were interested in developing their ICT skills and knowledge. This indicates that the participants are open to change and technology and they are willing to use technology in their classroom practice. Participants also reported high levels of ICT confidence and competence. Although the highest ICT confidence and competence was found in personal use, the lowest confidence and competence was detected in administration. This finding is important as the use of ICT in classroom practice is found to be increased by the willingness and ICT competence of ICT teachers to use ICT in their teaching (Aoki, Kim & Lee, 2013).

According to the result of the qualitative data obtained from interviews of the participants, having basic computer skills such as using the Internet and PowerPoint is enough for an effective ICT use in classroom practice. Moreover participants stated that as ICT tools were very popular nowadays, almost all of the teachers were familiar with computers and other ICT tools and this facilitates using ICT in classroom practice. They also stated that teachers should be open to change and hold positive attitudes towards using technology in teaching. Finally, interviewees expressed that training should be provided for teachers who wants to make more complex use of ICT in their teaching.

4.4. The Current Computer Use in EFL Classrooms in Artvin

As one of the aims of this study is to investigate EFL teachers' ICT use in their classroom practice, questions related to EFL teachers' current computer use in their teaching were addressed in the second, third and fourth item of Part IV and the third item of Part II in the questionnaire. First whether or not teachers used computers in their

teaching was investigated. Then the frequencies of their computer use in classrooms, where they used computers and the purposes of their use were examined.

Table 4.8.

ICT Uptake of the Participants

	F	%
Teachers using ICT in teaching	79	76,7
Teachers not Using ICT in teaching	24	23,3

Participants were asked whether they used computers in their teaching or not in the second item of Part IV. They were given two options as “Yes” and “No” and were expected to choose one of them. According to the results, 79 of the participants (%76,7) expressed that they used computers in their classroom practice while 24 of the participants (%26,3) said that they did not use computers in their classroom experience. The results are presented in Table 4.8. Considering that only 53 of the participants (%51,5) reported that they had computers in their classrooms, it can be said that the number of the participants who stated that they used computers in their classroom practice is relatively high. This indicates that EFL teachers in Artvin put a great importance on ICT and regarded ICT as valuable tool. It can also be concluded that even though teachers had limited ICT environment they used ICT in their classroom practice with their own efforts as one of the participant stated:

> “*Especially I try to use technology in primary school students’ lessons. When I need I bring my own computer.”* (Interviewee 10)

Participants were also asked about the frequencies of their computer use in classroom environment. Participants who stated that they used computers in their teaching (n:79) were asked to answer how often they used computers in their classrooms practice. They were supposed to choose only one option among 8 options which were “Daily”, “2-3 times a week”, “Weekly”, “Fortnightly”, “Monthly “, “Once per term”, “1-2 times per year” and “Never”. The frequency of computer use in classroom practice by EFL teachers can be seen in Table 4.9.

Table 4.9.

Frequency of Computer Use

	F	%
Daily	20	25,3
2-3 times per week	31	39,2
Weekly	11	13,9
Fortnightly	3	3,8
Monthly	10	12,7
1-2 times a year	4	5,1

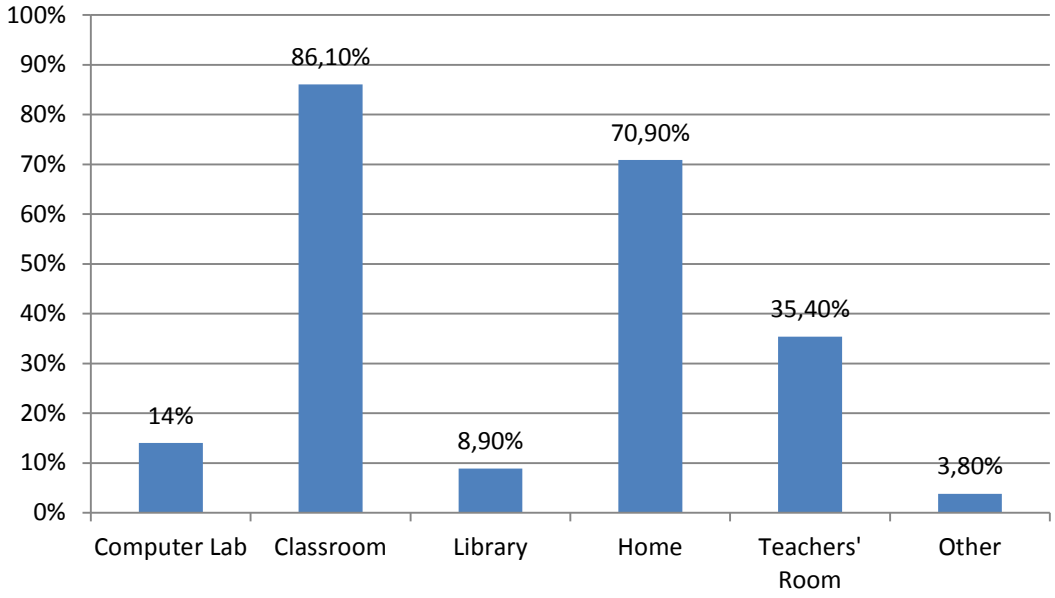
The number of the participants who expressed that they used computers “Daily” was 20 (%25,3). 31 of the participants (%39,2) stated that they used computers in the classroom “2-3 times per week”. 11 of the participants (%13,9) said that they used computers in classroom practice “Weekly”. 3 of the participants (%3,8) expressed that they used computers in the classroom “Fortnightly”. The number of the participants who said that they used computers “Monthly” was 10 (%12,7). 4 of the participants stated (%5,1) stated that they used computers in their classroom practice “1-2 times a year”. None of the participants chose the options “Once per term” and “Never”.

After determining the frequencies of their computer use participants who said that they used computers in their classroom practice (n:79) were asked where they generally used computers. There were 6 options as “Classroom”, “Computer Lab”, “Library”, “Home”, “Teachers’ Room” and “Other”. Participants were given option to choose all of them which applied their situation. Table 4.10 presents the places where EFL teachers general used computers.

According to the results, %86,1 of the participants (n:68) reported that they generally used computers in “Classroom”; %70,9 of the participants (n:56) expressed that they generally used computers in “Home”; %35,4 of the participants (n:28) said that they generally used computers in “Teachers’ Room”; %14 of the participants (n:11) stated that they generally used computers in “Computer Lab”; %8,9 of the participants (n:7) said that they generally used computers in “Library” and %3,8 of the participants (n:3) stated that they general used computers other places.

Table 4.10.

The Places Where EFL Teachers Generally Use Computers.



In the light of these data it can be said that a high percentage of EFL teachers in Artvin generally used computers in classroom. This may be because of the fact that the most well equipped places in schools are classrooms. Another reason may be that teachers don't have to share the computers in their classrooms and thus they have more time to use computers in classrooms. More than half of the participants also stated that they used computers in home. The reason may be that teachers have to prepare material for their lessons and thus they used computers in their homes.

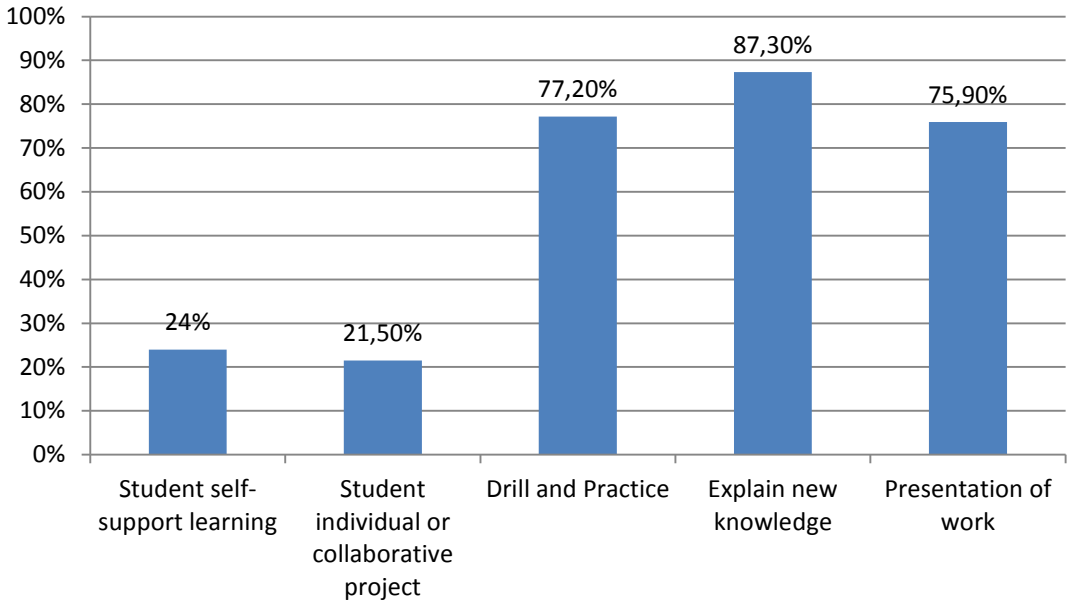
It was found that the participants did not much prefer computer lab, library and teachers' room for computer use. The reason of low percentages of computer use in computer lab, teachers' room and library may be that teachers have to share the computer in these places with other teachers and thus they may not prefer using computer or they may not find the chance of using computers in these places. Besides there may not be computer labs or computers in libraries and teachers' room in schools as schools have limited ICT environment.

Establishing how EFL teachers in Artvin used computers in their classroom practice was important. Participants were asked what they used ICT for in their teaching in the fourth item of Part IV. They were given 6 options as "Explain new knowledge",

"Student individual or collaborative project", "Drill and Practice", "Student self-support learning", "Presentation of work" and "Other". Participants were given chance to choose all applying options. The results are presented in table 4.11.

Table 4.11

What EFL Teachers in Artvin Used ICT for



The percentage of the participants who stated that they used ICT for "Drill and Practice" was %87,3 (n:69); 77,2 of the participants (n:61) expressed that they used ICT for "Drill and Practice"; %75,9 of the participants (n:60) reported that they used ICT for "Presentation of work"; %24 of the participants (n:19) said that they used ICT for "Student self-support learning" and %21,5 of the participants (n:17) expressed that they used ICT for "Student individual or collaborative project".

From the evidence in the present study, it can be inferred that teachers are still focusing mainly on grammar and language forms as participants stated that they generally use ICT for explaining new knowledge, drill and practice and presentation of work. The reason of this may be that these functions of ICT reduce workload of EFL teachers, make presentations more attractive moreover do not require a change in teachers' educational beliefs. Instead of writing on the whiteboard, they may prefer preparing presentations or exercises in computers by providing attractive elements such as visuals and animations.

In order to examine the current ICT use in EFL classrooms in Artvin more deeply, participants were asked four questions in the interviews. The first question was about the importance of adopting technology into language learning as teachers' opinions may affect their ICT use in their classroom practice. In the second question participants were asked to describe what the use of computers will be in classrooms. The third question was about EFL teachers' understanding of CALL as it is directly related to computer use in language classrooms. And finally the last question was about their experiences in using ICT. The participants were asked whether they had used ICT in their teaching and if they had used they were asked to describe their experience.

When asked about the importance of adopting technology, all of the participants stated that adopting technology into language learning is important. They suggested that using technology in language teaching improves the quality of education; shows the real language and transforms the language into a concrete concept by providing visuals, songs and motivation. Participants stated that:

> *"I think it is very important because our aim is to teach learners how to use language. And the technology shows the real language to children. For example movies, songs, lyrics, games with the help of them children can use language. Otherwise language becomes an abstract concept and stays inside the walls of the classroom."* (Interviewee 1)

> *"I think it is very important. The more education keeps pace with today's requirements and technology the more can be achieved. When we make ever-changing technology an integral part of our education system, then the quality of education will be improved."* (Interviewee 7)

> *"It is obvious that technology turn especially language teaching into attractive and entertaining field. I think it is quite important in terms of motivating students and individualising learning."* (Interviewee 9)

Some participants stressed that using technology in classroom practice facilitates teaching of four skills and thus technology should be an important part of language teaching and learning. They stated that using technology is important especially for teaching listening and speaking. Besides according to participants using technology in

language teaching provides real-life situations and thus students can use real language. Some participants stated that:

> *"It is highly important especially for listening and speaking. In order to provide real-life situations I use some web sites. These kinds of sites should be used. "*(Interviewee 5)

> *"I think it is very important. If we consider in present conditions, technology should be an integral part of language teaching. It has appeared that some language skills cannot be taught without technology. For example technology is a must for listening activities. Apart from that mutual interaction and speaking activities may be examples. Dialogues and group conversations via teleconferencing can also be tried. Thus I think they are primarily listening and speaking activities."* (Interviewee 6)

Some of the participants remarked the needs of the students. They expressed that language learning now starts in the second grade and children of today's world have grown up with technology and as they already have smart phones, tablets and computers traditional teaching with course books and whiteboards had limited effect. Therefore using technology is really important to meet their expectations and needs. Some of the participants addressed this issue by saying that:

> *"It is inevitable now. Well English language learning now starts in the second grade and beginners are grown up with technology. They have been familiar with technology since they were babies. Students yes students that have just begun learning a new language. They are growing up with technology. They all have smart phones, laptops and computers in their hands. Therefore isolating technology from language learning would be a mistake. Technology is a must now."* (Interviewee 2)

> *"I think it is very important. Now language learning starts from second grade. Students are taught English with course book and whiteboard for years. Sometimes worksheets or handouts can be distributed but this kind of teaching has limited effect."* (Interviewee 3)

> *"I think adopting technology into language teaching is very important. The most important thing is taking the needs of today's children*

> *into consideration. Technology is indispensable part of their lives. We should prepare content and subject according to their needs"*. (Interviewee 8)

Another topic addressed by the participant was motivation. Participants claimed that using technological devices such as computers or smart phones in classroom practice motivated the students and attracted their attentions which made classroom management very easy. One of the participants said that:

"Using technology is very important to provide motivation in the classroom because our students are very keen to technologic devices like smart phones and other devices. Using technology also attracts students' attention to the subject. With the help of technology, classroom management becomes very easy." (Interviewee 4)

Participants also expressed that by using technology it became easier to use different technique or method in language teaching. They also stated that when technology was used in teaching different learning styles can be more easily addressed. They stated that:

> "*Another reason is that when you use different technique and method, technology is more practical, it provides visuals and it becomes fun with technology. Finally I think it is important in motivating students."* (Interviewee 8)

> "*We have to use technology in language teaching. Firstly technology provides visuals. And it is also beneficial to those who have different learning styles in terms of multiple intelligences theory. I believe it is also beneficial to input and output."* (Interviewee 1)

After the importance of adopting the technology into language teaching, participants were asked what the computer use will be in classroom environment and who should benefit from the computer use. With these questions, it was aimed to reveal the reasons why EFL teachers in Artvin use computers in their teaching. Most of the teachers agreed that students should benefit from using computers in classrooms. They stated that students were restricted by authorities for the fear that they may broke down the technological devices. According to the participants, students should use computers

in the schools as much as teachers and students' achievement should be considered as priority. They expressed that:

> *"Computers should be constantly in students' use just like they can be used freely by the teachers in lessons. There are strict restrictions for students in our system. We generally restrict students too much by saying that computers may be broken down or something else. But I think student should use computers whenever they want."* (Interviewee 1)

> *"Of course students should benefit more. Teachers shouldn't use technology merely because using technology is easy for them. To what degree students will benefit from using technology this must be thought. To what extent do students use what they learned in real life this should be our priority."* (Interviewee 5)

> *"Of course students should benefit more. If we want to teach better students should be given opportunity to listen, speak and apply."* (Interviewee 8)

> *"Computers should be used in language classroom not only by teachers to explain new knowledge but also by students for individual purposes. The benefit of using technology to students should be based."* (Interviewee 9)

Some participants reported that using computers in teaching should benefit to both students and teachers. According to the participants, if using technology benefits to students then it also benefits to teachers as the aim of the teachers is to teach better. They also said that with using technology teachers can save time. They stated that:

> *"I think computers should be used efficiently in classroom. It should benefit to both students and teachers. If technology is used efficiently, teachers will save time and students will experience an effective learning using several senses thanks to multimedia environment in computers."* (Interviewee 7)

> *"Of course students should benefit more. After all if it benefits to students it also benefits to teachers. For examples songs or short videos can*

be presented to young learners. They love these kinds of things. Moreover there are actions of these songs if you have them perform the actions they both listen and sing as well as reading. In addition they can write and read a song they listened. I think there should be listening and speaking activities all the time." (Interviewee 3)

"Students must take the advantage of technology. We the teachers use it to save the time. It is very easy to attract the students' attention through technology. Teachers take the advantage of technology more than students." (Interviewee 4)

Another issue was how much computers should be used in teaching. The participants put forward the idea that computers should be used to enhance lessons in some phase of the lessons when technology is needed. They also stressed that computers should be used to achieve the aims of lessons not for non-educational purposes. They stated that:

"I think computers should be used in any of the warm-up, during or post phases of the lesson for a certain period. Using technology throughout the lesson is something I don't prefer." (Interviewee 8)

"First, we must decide how much we use technology. Not too much or too less. I use it in order to exercise the new subject. I adapted it in my lessons in that way." (Interviewee 4)

"I think it will benefit to both students and teachers. Probably deviation from the aim should be remarked. It should be the most important part. It can be ensured that students use computer for the aims of the lesson, they focus on the activity and they are not interested in something else." (Interviewee 6)

"I think rather than a constant use it would be better if technology is used to enrich the activities when it is required. The most ideal use of technology will be that students use programs and software such as DyNed in their free time, learn at their own pace and monitor their development in the progress." (Interviewee 9)

Finally the need of training was mentioned. According to the participants training for students, teachers and school management is required in order to use technology efficiently in teaching. They stated that there are still teachers who are unwilling to use technology; school managers who regard computers as waste of money and students who use technology in classrooms for non-educational purposes. They also expressed that there is a lack of qualified personnel to use technological devices in schools and by showing good examples of using technology the use of technology should be spread. They stated that:

> *"Actually there is a deficiency in this subject in Turkey. State schools are supplied with interactive whiteboards, tablets and computer within the FATIH project. Deficiency is in lack of the knowledge how to use them. There is also lack of personnel having required skills and ability how to use this technology efficiently. Students also use this technology which they are supposed to use interactively in lessons totally for different reasons. Why is this- because they have or don't have computers in their homes, social media draws their attention and they focus on social media. There are serious problems in using them. First of all students should be informed and trained. Of course teachers should also be trained and informed as still there are teachers who even don't know how to switch on and switch off the computer this is the reality. There are also teachers who are unwilling to learn technology and who say that I teach using course book and whiteboard. Firstly this condition must be fixed. Then the benefits and good examples of using technology in lessons should be introduced. I mean it should be shown to both teachers and students that using technology is not a demanding thing." (Interviewee 2)*

> *"Before teachers, school managers should be trained on how to use computers first. There are still school managements who consider technology as a waste of money and monsters.* (Interviewee 10)

The most common use of technology is found to be for providing videos, songs, visuals, activities and games to students. One of the participants exemplifies this by saying:

"I personally have students watch and listen to videos, videos that provide real-life situation in educational websites, dialogues and conversations. We play games, listen to songs and watch cartoons and animations in the classroom. I use like this." (Interviewee 5)

Third question addressed to investigate the current ICT use in EFL classrooms was about CALL. CALL is directly related to using ICT in language learning and teaching as it outlines how computers should be used in language learning and teaching. In order to examine their understanding of CALL participants were asked to make a definition and give an example of CALL.

None of the participants could make a proper definition of CALL. They all made predictions about the definition of it. The most common definition of CALL made by the participant is that CALL is the use of ICT tools in language teaching. Some of the definitions of participants are:

"I guess it is the integration of language learning and technology."(Interviewee 1)

"It means that there should be computers in classrooms and computers are used in every lesson." (Interviewee 3)

"We were taught such a subject at university. It wasn't so much detailed but I can describe it as using the computer during the teaching period." (Interviewee 4)

"I guess I have heard of it but I can't remember at the moment." (Interviewee 5)

"As I mentioned before it is the teaching of language skills through computers." (Interviewee 6)

"I think Computer Assisted Language Learning is a permanent teaching that addresses more than one sense of the students and provide active participation of the students." (Interviewee 7)

"Hmm. Let me think for a while. I think Computer assisted language learning means using activities and videos facilitating the improvement of

four language skills via computers in specific parts of the lessons." (Interviewee 8)

"I think computer assisted language learning is presenting different materials, choices and activities and thus enriching the lessons. Besides, technology provides opportunities for students to meet the culture of the language and real-use situations." (Interviewee 9)

One of the participants stated that although they had been taught CALL in university, what they had learnt about CALL was useless in reality as teachers and students did not have the required consciousness to use technological devices. S/he reported that:

"It was a lesson or part of lesson we are taught in university and it stayed like this. The roles of teachers, students and materials none of them works in real practice at least I can say that as a teacher working in a state school. Yes we have interactive whiteboards and tablets but as there isn't any students and teachers having consciousness to use them CALL is not much possible." (Interviewee 2)

When participants were asked to give an example of CALL, most of them said that DynEd software that MNE obliges in all levels of schools can be an example of it. Other examples stated by the participants included activities in which ICT tools are used:

"It may be a teaching in which visuals, audios and simulations are used. So both time and money can be saved and an efficient teaching can be provided."(Interviewee 7)

"For example using a video and asking questions about the video in order to motivate students in warm-up phase. Thus they both listen and speak." (Interviewee 8)

"For example educative games, vocabulary and listening activities, puzzles, electronic dictionaries and online conversations." (Interviewee 9)

Finally in the last question interviewees were asked to describe how they used ICT tools in their classroom practice if they had used before. With this question it was aimed to investigate the EFL teachers' classroom experiences. According to the findings

all of the interviewees expressed that they had used ICT in their classroom practice. Even though results show that ICT environment in schools is not sufficient, lack of ICT tools did not prevent students from using ICT tools in their teaching. This finding shows how much value EFL teachers in Artvin put on ICT. Some of the interviewees stated that they brought their personal computers in order to use ICT in their teaching. They expressed that:

> *"I have been using technology since I started teaching. I sometimes bring my laptop. I use it especially for songs, games and to provide visuals. I consistently use the computers in schools."* (Interviewee 1)

> *"Last year we don't have interactive whiteboards. We have only projection devices and we have to bring our own computer or use the school's mobile computer."* (Interviewee 2)

The interviewees were found to use ICT mainly for listening and speaking activities as well as drill and practice activities. They stated that they presented visuals, videos, songs and games via computers.

> "*There are lots of songs, chants and material especially for beginners and they can be presented only with computers. There may be short videos that explain the subject very well you have them watched in the classroom. You may not have flashcards all the time and they may be very expensive. With the help of computer technologies you can present them easily any time."* (Interviewee 2)

> *Yes I have used technology. Generally I use it for listening parts of the book. Then there are some educational sites such as Morpa Kampüs and EBA. I use the videos in these sites. For example there are great animations for second grades. In addition there are educational games- I also use the games. Generally I use technology for this way. (Interviewee 5)*

> *"I use interactive whiteboard every lesson. I use it for mainly listening activities. I also use it to drill and practice as well as making presentation."* (Interviewee 7)

"I have been using technology regularly since I started teaching. I used it mostly for listening texts. In addition I have used it for vocabulary teaching, watching educational videos, activities such as puzzles and fill in the blanks exercises, providing visuals in subjects like giving directions and such activities." (Interviewee 9)

Some of the participants stated that using songs and videos helped their students learn some words and phrases. They expressed that students loved singing the songs and performing the videos. According to their statements, this kind of teaching attracted even the least motivated students. They reported that:

"For DYNED, visuals and at least listening activities I use the computers in the school. Mostly I use pedagogically appropriate songs for listening. I am harvesting the benefits of these. Students have become learning phrases and words thanks to these songs, games and dances. I try to use them combining with TPR and I think it benefits." (Interviewee 1)

"As I work in primary school I teach young learners. I downloaded videos and present them in the class. We performed a few of the student's favourite videos with actions on 23 April. Students mimed. They can do it. Those who had said that students wouldn't do and perform saw it they can do. They said that don't try they could not do as our students came from families with low socio economic status. They have little interest in lessons but they can memorise the songs they listened in lessons." (Interviewee 3)

Some of the participants expressed that they used ICT to attract students' attention and motivate them in pre part of the lessons. Besides they stated that they used slide shows to explain knowledge. They said that:

"From the first day of my teaching career, I have been using the technology to attract my students' attention and provide active participation. They love it. I take the advantage of technology through slide shows and videos." (Interviewee 4)

"Yes I have been using computer, projector and interactive whiteboards. Generally I use it for warm-up to present a video in pre part of the lesson. I sometimes use videos or activities such as quiz or presentations

in order to provide repetition. Of course I also use slides to explain new knowledge." (Interviewee 8)

One of the participants stated that with the introduction of interactive whiteboards in their school they were able to present interactive presentations which addressed more senses. S/he stated that:

"*This year with the integration of IWBs I have started to use presentations introducing the subject but of course these presentations are - beyond PowerPoint- interactive ones. For example you open a story book, the word you touch is read and translated moreover you can hear the pronunciation of that word. Of course these are the benefits of interactive whiteboards. This is how I teach."* (Interviewee 2)

In sum, these findings show that majority of the participants used computes in their teaching even though there was a limited ICT environment. This finding is consistent with the findings of Heaney (2012) as he found in his study that ICT was regarded as a precious tool in language learning. It was also found that teachers generally used computers in classrooms and home for the purposes of drill and practice, explaining new knowledge and presentation of work. This indicates that teachers do not use ICT for communicative reasons rather they use ICT for grammar and language form activities. The reason for that may be the national examinations in Turkey are still grammar based and this puts a pressure on EFL teachers to focus on grammar and language forms.

All of the participants agreed that adopting technology into language learning is important and students should benefit from the use ICT in classroom practice. The participants also stressed that technology is a useful mean of meeting the needs and expectations of today's children. These findings are consistent with Prensky's digital native concept which was explained previously and show that EFL teachers in Artvin are aware of the benefits of using ICT in classroom practice.

The participants supported the idea that computers should be used to achieve the aims of the lessons by enhancing the quality of teaching and activities. Nevertheless their use of ICT tools in teaching was found to be limited to listening and speaking activities. Similar to Wang's study (2014) in which he found that the use of ICT in

classrooms is limited to presentations and educational websites and software are not used, little communicative use of ICT was detected in both questionnaire and interviews in this study. This may be a result of lack of CALL and pedagogical knowledge as it was found in the questionnaire that the training EFL teachers had received was mainly based on developing technological skills and in the interviews lack of CALL knowledge was detected. None of the participants made a proper definition of CALL instead they all made predictions about what it would be. They also expressed that training is necessary as there is not enough personnel who knows how to use ICT efficiently. Considering these findings of the present study, it may be said that EFL teachers in Artvin suffer from lack of pedagogical knowledge which is a requirement for using ICT tools for communicative purposes. Another reason of this may be that most of the schools are not well-equipped and thus EFl teachers may not access ICT tools which are necessary to use ICT for communicative purposes.

4.5. Factors Influencing the Use of ICT by EFL Teachers in Their Teaching

EFL teachers' use of ICT in their classroom practice can be affected by several factors. In this section the effect of five factors which are age, teaching experience, school level, school type and location of school on the use of ICT by EFL teachers in their teaching was analysed.

4.5.1. The Effect of Age on the Use of ICT in Classroom Practice

Considering that age may influence the use of ICT, the effect of age factor on the EFL teachers' use of ICT in their teaching was investigated. Chi Square test was used in the analysis. In the analysis the variables 36- 45 years old and 46-55 years old were combined as "36-55 years old" for the Chi Square test. The results of the effect of age on the use of ICT in classroom practice can be seen in Table 4.12.

Table 4.12.

The effect of age on the use of ICT in classroom practice

	ICT Use in Classroom Practice			
	Yes		No	
	N	%	N	%
20-25 years old	23	79,3	6	20,7
26-35 years old	47	82,5	10	17,5
36-55 years old	9	53	8	47

X^2: 25,199 p: 0,000

29 of the participants were between 20-15 years old and %79,3 of them expressed that they used ICT in their teaching whereas %20,7 of them stated that they did not use ICT in their teaching. Of the 57 participants who were between 26 and 35 years old, %82,5 said that they used computers in classroom environment while %17,5 reported that they did not use ICT . 17 of the participants were between 36 and 55 years old and while %53 of them expressed that they used ICT in their classroom practice, %47 of them stated that they did not use ICT in their teaching.

When Table x is examined, it can be said that there is a very significant difference (X^2: 25,199; $p< 0,05$) in terms of age. It can also be seen in the table that although ICT use of EFL teachers in their teaching increased slightly in the variable "26-35 years of old" the use of ICT in classroom environment significantly decreased as they get older. This result is also consistent with other studies (Li & Walsh, 2008; Solmaz, 2011). This finding may be explained by Prensky's digital natives and digital immigrants concepts which were mentioned in this study. As the births of the younger teachers were concurred with the flourish of the technology, the younger teachers acquire the technology while older teachers had to learn technology after it had become popular. For this reason younger teachers may prefer using technology in their teaching more than the older teachers. Another reason of this finding may be that older teachers do not want to change their educational beliefs as using technology in language learning and teaching is a relatively new concept in Turkey.

4.5.2. The Effect of Teaching Experience on the Use of ICT in Classroom Practice

The teaching experience of EFL teachers was regarded as a factor that might influence the ICT use of EFL teachers in their classroom practice. Therefore Chi Square test was used in the analysis. In the analysis the variables 11- 20 years of experience and 21-30 years of experience were combined as "More than 10 years of experience" for the Chi Square test. The results of the effect of teaching ecperience on the use of ICT in classroom practice can be seen in Table 4.13.

Table 4.13.

The Effect of Teaching Experience on the use of ICT in Classroom Practice

	Computer Use in Classroom Practice			
	Yes		No	
	N	%	N	%
1-5 years of experience	45	78,9	12	21,1
6-10 years of experience	23	92	2	8
More than 10 years of experience	11	52,4	10	47,6

X^2: 10,385 p: 0,006

57 of the participants had 1-5 years of teaching experience and %78,9 of them reported that they used ICT in their classroom practice whereas %21,1 of them stated that they did not use ICT in their teaching. 25 of the participants stated they had 6-10 years of experience and %92 of them said that they used ICT in their teaching while %8 of them expressed that they did not use ICT in their classroom practice. Of 21 participants who stated that they had more than 10 years of experience %52,4 stated that they used ICT in their classroom practice and 47,6 said that they did not use ICT in their teaching.

When Table 4.13 is examined, it can be said that there is a very significant difference (X^2: 10,385; $p< 0,05$) among teachers who had different group of teaching experiences. It can also be seen in the table that the use of ICT by EFL teachers in their classroom practice increased in the second variable and then significantly decreased in the third variable. In other words the more experienced the they are, the less likely EFL teachers are to use ICT in their reaching. The reason of that may be the age factor. As the more experienced teachers are older, they had to learn technology and thus they may

face with difficulties in using technology. Another reason may be that they have developed a learning strategy of their own and they are not willing to change their teaching methods.

4.5.3. The Effect of Gender on the Use of ICT in Classroom Practice

Considering that gender of the participants may affect the use of ICT, the effect of gender factor on the EFL teachers' use of ICT in their teaching was investigated. Chi Square test was used in the analysis. The results of the effect of age on the use of ICT in classroom practice can be seen in Table 4.14.

Table 4.14.

The Effect of Gender on the use of ICT in Classroom Practice

	Computer Use in Classroom Practice			
	Yes		No	
	N	%	N	%
Male	32	80	8	20
Female	47	74,6	16	25,4

X^2: 0,399 p: 0,492

40 of the participants were male and %80 of them stated that they used ICT in their teaching while %20 of the male participants expressed that they did not use ICT in classroom environment. The number of female participants was 63.The percentage of the female participants using ICT in their classroom practice was %74,6 and the percentage of the female participants who reported that they did not use ICT in their classroom practice was 25,4

It can be concluded from the results that even though there is a slight difference between male and female participant in favour of male participants, no significant difference was found (X^2: 0,399; $p > 0,05$) between gender of the participants and the use of ICT in classroom practice. This result are similar to other studies which indicate that there is little or no effect of gender on the use of ICT (Tezci, 2009; Rahimi & Yadollahi, 2011;). As the participants agreed using ICT tools in classroom environment does not require a high level of competency and most of the people have basic computer skills in today's world. Moreover participants were found to use ICT mainly for explaining knowledge, drill and practice and presenting works which does not require a special skill. For that reason it may be said that no difference was found between the

gender of participants and use of ICT in classroom environment because using ICT in teaching is not a complex task and everyone who has basic skills of computer can use ICT tools in their teaching.

4.5.4. The Effect of School Level on the Use of ICT in Classroom Practice

Taking into consideration that the use of ICT may be affected by the school level the EFL teachers worked, the effect of school level factor on the EFL teachers' use of ICT in their teaching was examined. Chi Square test was used in the analysis. The results of the effect of school level on the use of ICT in classroom practice can be seen in Table 4.15.

Table 4.15.

The Effect of School Level on the use of ict in Classroom Practice

	Computer Use in Classroom Practice			
	Yes		No	
	N	%	N	%
Primary School	22	73,3	8	26,6
Secondary School	26	81,3	6	18,7
High School	31	75,6	10	24,4

X^2: 1,000 p: 0,801

Of 30 participants working in primary school %73,3 expressed that they used ICT in their classroom practice while %26,6 stated that they did not use ICT in their teaching. 32 of the participants stated that they worked in secondary school and %81,3 of them reported that they used ICT in classroom environment whereas %18,7 of them said that they did not use ICT in their teaching. 41 of the participants said that they worked in high school and the percentage of the participants who stated that they used ICT in their teaching was %75,6 whereas the percentage of the participants expressing they did not use ICT in the classroom environment was 24,4.

According to the results of Chi Square test, there is no significant effect of school level on the use of ICT by EFL teachers in classroom practice (X^2: 1,000; $p>0,05$). The results indicated similar ICT uptake among the participants working in different levels of schools. The reason of this finding may be that the great majority of the participants were convicted that using ICT in language classrooms was beneficial and expressed a high level of ICT uptake. Moreover they stated that using ICT in

classroom attracted students and raised their attention and in order to harvest these benefits EFL teachers working in all levels of schools may prefer using ICT.

4.5.5. The Effect of School Location on the Use of ICT in Classroom Practice

The school location of EFL teachers was considered as a factor that might affect the ICT use of EFL teachers in their teaching. Therefore Chi Square test was used to determine whether there were any differences. The results of the effect of school level on the use of ICT in classroom practice can be seen in Table 4.16.

Table 4.16

The Effect of School Location on the use of ICT in Classroom Practice

	Computer Use in Classroom Practice			
	Yes		No	
	N	%	N	%
Rural	30	78,9	8	21,1
Town	49	75,4	16	24,6

X^2: 0,170 p: 0,680

38 of the participants was working in rural schools and %78,9 of them stated that they used ICT in their teaching whereas %21,1 of them expressed that they did not use ICT in classroom practice. 49 of the participants was working in schools which were located in town and the percentage of them reporting that they used ICT in their classroom practice was %75,4 while the number of the participants saying that they did not use ICT in their teaching was %24,6.

It can be seen that there is a slight difference between participants working in rural parts and participants working in towns in favour of the participants working in rural parts. Nevertheless no significant difference was found between the school location and EFL teachers' ICT use (X^2: 0,170; p>0,05). ICT tools have become very popular nowadays and almost everyone has smart phones, tablets or laptops. Considering that one can integrate even smart phones into language learning and some of the interviewees expressed that they brought their personal computers in classroom environment it may be said that EFL teachers use ICT tools with their own effort in order to harvest the benefits of using ICT.

4.6. Factors Motivating EFL Teachers to Use Computers

After the ICT environment, the skills and knowledge and current computer use of EFL teachers, factors motivating EFL teachers in Artvin to use computers in their teaching were investigated. The seventh item of Part IV in the questionnaire included 23 statements about motivating factors of ICT use in teaching. In order to determine the factors motivating EFL teachers in Artvin to use computers participants who stated that they used computers in their classroom practice were asked choose the statements that applied to them. The results are displayed in Table 4.17.

The first statement was “ICT helps me to change the way I teach” and 66 of the participants (%83,5) considered this statements as a motivation factor. The second statement was “I am forced to adopt ICT into teaching” and 11 of the participants (%13,9) marked this statement as a motivation factor. As for the third statement which was “All my colleagues are keen to use ICT in teaching” 23 of the participants (29,1) stated that it was a motivation factor.

Table 4.17.

Factors Motivating Teachers

	F	**%**
ICT helps me to change the way I teach	66	83,5
I am forced to adopt ICT into teaching	11	13,9
All my colleagues are keen to use ICT in teaching	23	29,1
It is becoming a trend to use ICT in teaching	44	55,7
I like innovation	58	73,4
Language learning will become easy by using ICT	70	88,6
Our school is very supportive in using ICT in classroom	28	35,4
Everyone is equipped with a computer for using in classroom.	11	13,9
I am expected to use ICT in the classroom	19	24
ICT reduces my workload	35	44,3
We are trained to use technology in classroom	35	44,3
It is easy to get a teaching reward when you teach using ICT	25	31,6

Table 4.7. *(Continuation)*

ICT makes the lessons more interesting	61	77,2
Children who do not like learning are motivated by ICT	59	74,7
Using ICT makes teaching enjoyable	71	89,9
Learning becomes great fun when using ICT	63	79,7
Using ICT allows me to present work to students which looks nicer than on the blackboard	61	77,2
ICT helps make administration more efficient	54	68,3
ICT provides numerous authentic materials for language learning	56	70,8
The interaction between teachers and students is becoming more when ICT is used	37	46,8
There are lots of software packages available for me to use in teaching English to my students	31	39,2
I am good at using ICT, so I would like to try using it for teaching purpose	32	40,5
ICT helps students to practice grammar with immediate feedback	58	73,4

According to 44 of the participants (%55,7) the fourth statement which was “It is becoming a trend to use ICT in teaching” was a motivation factor. 58 of the participants (%73,4) expressed that the fifth statement which was “I like innovation” was a motivation factor. The sixth statement was “Language learning will become easy by using ICT” and 70 of the participants (%88,6) reported that it was a motivation factor for them.

According to 28 of the participants (%35,4) the seventh statement which was “Our school is very supportive in using ICT in classroom” was a motivating factor. 11 of the participants (%13,9) sated that the eighth statement which was “Everyone is equipped with a computer for using in classroom” was a motivation factor for them. 19 participants (%24) marked the ninth statement “I am expected to use ICT in the classroom” as a factor for their computer use. The tenth statement was “ICT reduces my workload” and 35 of the participants (%44,3) reported that this item was a reason for their computer use.

“We are trained to use technology in classroom” was the eleventh statement and 35 of the participant (%44,3) said that this was a reason for their computer use. The twelfth statement was “It is easy to get a teaching reward when you teach using ICT” and 25 participants (%31,6) said that this statement was motivation factor. 61 of the participants (%77,2) expressed that the thirteenth statement “ICT makes the lessons more interesting” was a motivation factor for them. According to 59 of the participants (%74,7), the fourteenth statement “Children who do not like learning are motivated by ICT” was a reason for computer use. The fifteenth statement was “Using ICT makes teaching enjoyable” and 71 of the participants (89,9) expressed that this statement was a motivation factor.

63 of the participants (%79,7) marked the sixteenth item “Learning becomes great fun when using ICT” as a motivation factor while according to 61 of the participants (%77,2) stated that the seventeenth item “Using ICT allows me to present work to students which looks nicer than on the blackboard” was a motivation factor for them. The eighteenth statement was “ICT helps make administration more efficient” and 54 of the participants (%68,3) reported that they considered this statement as a motivation factor. “ICT provides numerous authentic materials for language learning” was the nineteenth statement and according to 56 of the participants (%77,8) stated that this statement was a motivation factor for their computer use.37 participants (%46,8) said that the twentieth statement “The interaction between teachers and students is becoming more when ICT is used” was a reason for their computer use.

The twenty-first statement was “There are lots of software packages available for me to use in teaching English to my students” and 31 of the participants (%39,2) stated that this statement was a factor for their computer use. 32 of the participants considered the twenty-second statement “I am good at using ICT, so I would like to try using it for teaching purpose” as a motivating factor. Finally “ICT helps students to practice grammar with immediate feedback” was the last statement and 58 of the participants reported that they regarded this statement as a motivating factor.

When the results are examined it can be said that EFL teachers in Artvin use ICT in their classroom practice for its benefits to both students and teachers, fun feature of ICT in teaching and learning process, motivating features of ICT, the opportunities of

providing immediate feedback and authentic materials. it can be said that the results are similar to other studies in which benefits of ICT to students and fun and motivating aspects of using ICT was found to be motivating factors. (Cox, Preston & Cox, 1999; Fiktorius, 2013; Ebrahimi, Eskandiri & Rahimi, 2013). 10 most motivating factors stressed by the participants are presented in Table 4.18.

Table 4.18.

10 Most Motivating Factors

Using ICT makes teaching enjoyable
Language learning will become easy by using ICT
ICT helps me to change the way I teach
Learning becomes great fun when using ICT
Using ICT allows me to present work to students which looks nicer than on the blackboard
ICT makes the lessons more interesting
Children who do not like learning are motivated by ICT
I like innovation
ICT helps students to practice grammar with immediate feedback
ICT provides numerous authentic materials for language learning

It can be concluded that EFL teachers in Artvin were aware of the advantages that ICT provide for both students and teachers and they were harvesting these advantages. They also believed that finding and presenting authentic materials which have a crucial importance in language teaching and learning was easier with the help of ICT tools. It can also be said that participants adopted ICT in order to motivate their students as ICT provides fun and lessons become enjoyable with the use of ICT tools. The participants also emphasized the importance of innovation by stating that they used ICT in their teaching as they liked innovation. Participants were also well aware of the limited effect of traditional teaching in language classroom and thus they use ICT in their teachings in order to change their teaching methods. Finally participants stated that the immediate feedback to grammar activities was one of the motivating factors of using ICT in classroom environment. This finding is supported by Abu Naba’h (2012) who found that computer assisted teaching improved the grammar performance of the students.

In the interviews participants were asked whether there is a difference between lessons in which technology is used and lessons in which technology is not used. By asking this question it was aimed to reveal the factors and reasons that motivate and prompt EFL teachers to use ICT tools in their teaching practice. Almost all of the participants stated that there is a significant difference between lessons in which technology is used and lessons in which technology is not used in favour of the lessons in which technology is used. According to the participants, it was easier with technology to draw students' attention. They argued that especially in school which had a low socioeconomic profile the difference was more significant as it could be possible drawing the attentions of students who forgot to bring their textbooks and books in the classroom. One of the participants explained this argument as:

> "*There are differences. For example you draw the students' attention when you use technology. In schools whose students come from families with low socio economic status if you don't use computers students may forget bringing their books and notebooks and they don't want to write. If you use computer you can draw their attention even if they don't have any materials with them. Of course there will still be distracted students but very few in number."* (Interviewee 3)

Some of participants said that students' attention could be drawn with technology as students were familiar with and interested in technology. They also added using technology was an efficient mean of removing the dullness and boringness in classroom environment in turn transforming the language learning and teaching environment into an environment full of fun. They stated that:

> "*As students are very interested in technology, their attention can be easily drawn when technology is used in the classroom practice. They wonder what will come next. I found technology beneficial in terms of drawing attention. In order to break boringness and dullness, technology is a necessity."* (Interviewee 5)

> *"Absolutely there are. While lessons are more interactive, efficient and fun with computers, lessons are dull and boring without computers.*

Computers are also important as a mean of motivation. They motivate students in classroom and thus lessons become fun." (Interviewee 8)

One of the participants suggested that teaching in which technology is used would be more efficient than the traditional ways of teaching as you could activate affective domain by using technology in classroom environment. S/he also argued that students would focus on the subject better with the help of the technology. S/he said that:

"Of course there are. No matter how successful it is, it isn't possible that the teaching without using computer will be beneficial as affective domain is not addressed in this kind of teaching. Apart from this, when it is compared to teaching without computers, it is more easily ensured that students focus on the subject as using technology draws their attention." (Interviewee 7)

Participants also stressed the permanence of learning. They believed that using technology in lessons contribute to the permanence of learning. They proposed that by designing a learning environment addressing all learning styles students were given chances to use what they learned in lessons and in turn the permanence of learning would be improved. They stated that:

"Firstly, If there is computer, the time can be used more efficiently. As I mentioned before more permanent learning can be provided because we can design a learning situation that appeals to all learning styles. Moreover we can ensure students use what they learned in the lesson with the help of technology. "(Interviewee 1)

"Of course there is a difference but it would be a mistake to say that this is an exact difference. I use DYNED in my school. What students learn during that time they spend in front of the computers is permanent. It becomes a different lesson for students so they can't forget what they learned. Maybe this is because of that computers constitute a difference apart from teacher." (Interviewee 2)

"I think as using technology addresses more senses and attracts students, the effect and permanence of teaching will improve." (Interviewee 10)

Last issue expressed by the participants in the interviews was active participation of the students. They stated that active participation of the students could be enhanced by using technology in lessons. The statement of one of the participants exemplifies this. S/he stated that:

"Of course there are. Teaching with using computers is more attractive and motivating. Besides, active participation of the students can be provided thanks to computers." (Interviewee 9)

4.7. Factors Preventing ICT Use of EFL Teachers in Classroom Practice

Investigating factors preventing EFL teachers' ICT use in their teaching is of crucial importance. As is mentioned in this study using ICT has a lot of benefits in language classroom and determining what prevents EFL teachers from using ICT may help us remove these factors in teaching environment and thus enable EFL teachers to use ICT in classroom practice. Item 8 in Part IV in the questionnaire used in this study addressed this issue.

In order to determine the factors that prevent EFL teachers from using ICT 21 statements were formed. All of the participants were asked to choose the statements that could be applied to their environment. It was thought that participants who stated that they used ICT in their classroom practice might also be precluded by some factors as well as participants who stated that they did not use ICT tool in their teaching. Therefore, all of the participants were asked to fill this item. 9 of the participants stated that there were not any factors that prevented their ICT use in their teaching. Therefore the number of the participants who filled this item was 94. The results are presented in Table 4.19.

The first statement was "I have difficulty in using the computer myself" and 13 of the participants (%13,8) stated that this statement was a preventing factor for them. 19 of the participants (20,2) expressed that the second statement which was "I don't know how to integrate ICT in my teaching" prevented them from using ICT in their

teaching. The number of the participants who considered the third statement which was "I am not confident enough to use computer in front of my students" as preventing factor was 14 (%14,9). The fourth statement was "I don't have a computer to use in teaching" and the number of the participants regarding this statement as a preventing factor was 18 (%19,1).

Table 4.19.

Factors Preventing EFL Teachers' use of ICT

	F	**%**
I have difficulty in using the computer myself	13	13,8
I don't know how to integrate ICT in my teaching	19	20,2
I am not confident enough to use computer in front of my students	14	14,9
I don't have a computer to use in teaching	18	19,1
I can't find any relevant software packages	28	29,8
I don't have time to prepare a lesson using ICT	26	27,6
There are not enough electronic resources	37	39,3
Lack of encouragement from school leaders	45	47,9
Lack of technician support in my school	66	70,2
Lack of student computers which can be used in the classroom	52	55,3
Lack of access to a computer lab	48	51
Lack of skills to develop courseware for my students	33	35,1
Students are not well-prepared to use ICT in class	30	31,2
It will distract students' attention from learning.	6	6,4
Lack of integration model to learn from	25	26,6
Lack of CALL training	26	27,7
I don't think ICT can really make a difference to language learning	6	6,4
Heavy pressure of exams	36	38,3
Students' negative attitudes towards using a computer to learn	16	17
It reduces speaking time; therefore, it's not good for language learning	6	6,4
I don't want to be different from other teachers	6	6,4

According to 28 of the participants (29,8), the fifth statement which was "I can't find any relevant software packages" was a preventing factor. 26 of the participants (%27,6) reported that the sixth statement which was "I don't have time to prepare a lesson using ICT" prevented their use of ICT in their classroom practice. The seventh statement was "There are not enough electronic resources" and 37 of the participants stated (%39,3) that this statement was a preventing factor.

"Lack of encouragement from school leaders" was the eighth statement and 45 of the participants (%47,9) marked this statement as a preventing factor. 66 of the participants (%70,2) considered the ninth item which was "Lack of technician support in my school" as a preventing factor for their ICT use in classroom practice. According to 52 of the participants, "Lack of student computers which can be used in the classroom" which was the tenth statement precluded their ICT use in teaching. 48 of the participants (%51) expressed that "Lack of access to a computer lab" which was the eleventh statement prevented them from using ICT in their classroom environment.

The twelfth item was "Lack of skills to develop courseware for my students" and 33 of the participants (%35,1) regarded that statement as preventing factor. "Students are not well-prepared to use ICT in class" was the thirteenth statement and according to 30 of the participants (%31,2) this statement was a preventing factor. 6 of the participants (%6,4) said that the fourteenth statement which was "It will distract students' attention from learning" was preventing factor. 25 of the participants (%26,6) expressed that "Lack of integration model to learn from" which was the fifteenth statement prevented them from using ICT tool in classroom practice. According to 26 of the participants (%27,7) "Lack of CALL training" precluded their ICT use in their teaching.

"I don't think ICT can really make a difference to language learning" was the seventeenth statement and according to 6 of the participants (%6,4) this statement was a preventing factor. 36 of the participants (%38,3) reported that "Heavy pressure of exams" which was the eighteenth statement prevented them from using ICT tool in their classroom environment. "Students' negative attitudes towards using a computer to learn" was the nineteenth statement and the number of the participants who stated that this statement was a preventing factor was 16 (%17). Finally according to 6 of the

participant the twelfth statement which was “It reduces speaking time; therefore, it’s not good for language learning” and the twenty-first statement which was “I don’t want to be different from other teachers” precluded their ICT use in their classroom practice.

According to the results the EFL teachers in Artvin could not use ICT tools in their classroom practice mainly because of lack of technical support and encouragement, lack of computers and resources, heavy pressure of exams and unpreparedness of students to use ICT in classroom. The results are similar to other studies who investigated the preventing factors of ICT use (Mumtaz, 2000; Goktas, Yildirim & Yildirim, 2005; Nim, Park & Son, 2009; Badia, Meneses & Sigales, 2013; Bozdogan & Ozen, 2015). 7 most preventing factors for EFL teachers in Artvin can be seen in Table 4.20.

Table 4.20.

7 Most Preventing Factors

Lack of technician support in my school
Lack of student computers which can be used in the classroom
Lack of encouragement from school leaders
There are not enough electronic resources
Heavy pressure of exams
Lack of skills to develop courseware for my students
Students are not well-prepared to use ICT in class

It can be understood that EFL teachers in Artvin did not get technical support in their schools as well as encouragement from school management. Most of the ICT tools are expensive and fragile. Moreover they need periodical maintenance. For that reason school managements’ encouragement is very important in supplying classrooms with ICT tools and technical support is crucial in keeping ICT tools in good conditions. If school management do not supply ICT tools and do not keep existing ICT tools in good conditions, EFL teachers will not use these tools in their teaching. For this reason MNE appoints an Information Technologies teacher to every school within the FATİH Project for maintenance of the ICT tools.

Participants also reported that heavy pressures of exams prevented them from using computers in their classroom practice. In Turkish education system there are national examinations for attending high school and university. Considering that tests in these national examinations mainly based on grammatical knowledge, teachers may not use ICT as much as they desire because they are expected to help their students get high scores in these exams and thus they may prioritise grammar teaching.

Taking the participants' lack of CALL knowledge into consideration, it is not surprising that "Lack of skills to develop courseware for my students" and "There are not enough electronic resources" were found to be two of the most preventing factors for ICT use. As teachers do not have a proper CALL knowledge, they may not prepare materials using ICT tools for their teaching.

The unpreparedness of student to use ICT in classroom environment was also stressed by the participants. Although ICT tools have become very popular, there are still a large number of people who cannot access ICT tools because of financial problems. Especially students who live in rural parts are not familiar with ICT tools and when it is combined with lack of ICT tools in schools which was mentioned in previous sections their preparedness is influenced negatively .One of the participants explains this as following:

> "*Problems such as lack of budget and lack of hardware and software pose troubles for many schools in Turkey. For example most of my students who live in the villages don't have computers. As our school don't have a computer class because of lack of budget these students cannot access to computers. So the students cannot attain computer literacy."* (Interviewee 9)

Apart from questionnaire, the interview questions also included questions which aimed to discover the factors that prevent EFL teachers from using ICT tools in their classroom practice. For this section whether there was any support for teachers who wanted use technology and whether or not they had faced with difficulties while using computers in their teaching were asked to participants. They were also supposed to describe the kind of support and difficulties if there were. Some of the factors such as lack of computers and computer classrooms were mentioned in previous sections. Most

of the participants complained about lack of budget. They stated that their schools had limited budget and they could not afford buying ICT tools. One of the participants stated that:

> "*We can use technology if we bring our own computers as there is a lack of computers in the school. There is only one projection device in our school. Teachers who want to use it can bring it to their classrooms. Apart from this there is no support. We can't get support outside the school. And there is no budget in our school. So we cannot do anything."* (Interviewee 10)

One of the participants stated that especially primary schools had very limited budget and they have to insist for being supplied with ICT tools. Therefore they could not use technology although they were willing to use. S/he expressed that:

> *"Actually there isn't. We get something only if we insist on. We have a budget problem. They give little allowance to primary schools. I think this is discrimination. All school should have the same amount of allowance. Although we are willing to use technology, we can use it only in one classroom. When the projection device is broken down, we insist for weeks that the projection device should be fixed."* (Interviewee 3)

According to some of the participants although they had budget problems, their school management tried their best to support the teachers. They stated that their school management was trying to use what they had efficiently to help EFL teachers harvest ICT in their teaching. They stated that:

> *"When we face some difficulties they do their best to overcome. But there may be some situations that they cannot do anything. We don't get much technical support outside the school. The school management are aware of the situation. They try to help as much as they can. But unfortunately they have limited things to do."* (Interviewee 1)

> *"Even if there is not much financial support, the opportunities the school have are offered."* (Interviewee 2)

"A computer and a projection device may be provided. It is the only opportunity we have at the moment. Of course they cannot provide a computer for every student in my classroom." (Interviewee 6)

"Although they have some financial problems, they are promoting technology use in classrooms" (Interviewee 9)

On the other hand some of the participants reported that their school management was not supportive. They expressed that:

"There is not so much support from the administration. Interactive whiteboards have already been installed in our school. Our teacher profile is a bit old. They are not very willing to use them." (Interviewee 4)

"We are confused as the school management is constantly changing. When the school management get used to school, they are replaced by new management. So we can't get much support from school management." (Interviewee 7)

When the difficulties that EFL teachers in Artvin had faced during their teaching were examined, the most common difficulty was also found to be technical problems. Participants had already stated that lack of technical support prevented their ICT use in classroom practice in the questionnaire and the results of the interviews validated this finding by stating that EFL teachers in Artvin faced with technical difficulties. Participants expressed several technical problems. One of the participants mentioned about antifreeze program in their computers which s/he did not know how to use. She stated that:

"I was bringing my computer as the computer in school didn't have a monitor. There was just the computer case and it erased everything I had loaded because of the filtering program. Then I learned that if I loaded in D drive in the computer it wouldn't be erased and I did like that." (Interviewee 3)

Some of the participants complained about the touching screen of the interactive whiteboards. They stated that:

> *"At the beginning I had some troubles because of the touching screen of interactive whiteboards. But after getting familiar, I haven't faced any problems."* (Interviewee 7)

> *"For computers no. But I have faced some troubles while using interactive whiteboards. As they have touch screen we can have very simple troubles such as closing the browser accidentally. Apart from that the most serious problem is the Internet filter of MNE as I mentioned."* (Interviewee 8)

Finally some of the participants stated that there were power cuts which affect their teaching. They expressed that no matter how successfully prepared a lesson would collapse when there was a power cut. They reported that:

> *"I have faced with technical problems I mentioned before. There may be power cut or the computers may freeze."* (Interviewee 1)

> *"Eventually this is technology and it depends on the electricity. When the power is cut you cannot do anything. If you don't have power plant your plan falls down even if you prepared the best lesson in the world."* (Interviewee 2)

Similar to the findings of Goktas, Yildirim & Yildirim (2005) the findings of the present study also show that lack of budget is the main factor that prevents EFL teachers from using ICT tools in their teaching. As schools do not have enough budget and do not get technical support from outside the school, school managements cannot support teachers in terms of hardware and software. Moreover there is a lack of technical support in schools. When students face with some difficulties they cannot get support to overcome these problems. One reason of that may be there is a lack of personnel who keeps ICT tools working and when ICT tools are broken down school managements are not able to outsource because of financial issues. For that reason EFL teachers suffer from lack of computers and technical support. Students also cannot attain required knowledge for using ICT in lessons as there is lack of computers that students can use which was mentioned in previous sections.

4.8. Areas EFL Teachers Wanted to be Supported to Use ICT Better

After analysing ICT environment, ICT skills and training, the current ICT use of EFL teachers and motivating and preventing factors in using ICT, areas EFL teachers wanted to be supported to use ICT better in their classroom practice were analysed in this section. As the teachers are real practitioners of ICT tools in the classroom environment, their expectations are of crucial important in facilitating the use of ICT by EFL teachers. By meeting their expectations and overcoming the problems stated by EFL teachers, better ICT use in the classroom practice may be enhanced. In order to determine what areas EFL teachers would like to get support to use ICT, fourteen statements were formed in item 9 of the Part IV. Participants were expected to choose the statements which applied to them. The results can be seen in Table 4.21.

Table 4.21.

The areas EFL teachers needed support

	F	**%**
More computers that can be used in classroom	78	75,7
More access to Internet	80	77,7
More relevant software packages to choose from for my students	77	74,7
More training on how to use computer	65	63,1
More training on pedagogy in implementing technology into classroom	45	43,7
More technician support in class	64	62,1
More good examples to show how to successfully implement ICT in teaching English	53	51,5
More support from school leaders	61	59,2
More encouragement from colleagues	39	37,9
More understanding from students and parents	44	42,7
Less stress from exams	54	52,4
Less homework to correct	43	41,7
Less time in monitoring and administrating students	43	41,7
Students are provided proper training to use computers to learn	51	49,5

78 of the participants (%75,7) expressed that their use of ICT in their teaching would have been facilitated if there had been “More computers that can be used in

classroom" which was the first statement. Considering that interviewees complained about lack of computers and there were computers in only %51,5 of the classrooms, this finding is understandable. It can be said that the use of ICT in classroom practice will improve when more classrooms are equipped with computers.

80 of the participants (%77,7) reported that "More access to the Internet" which was the second statement would contribute to their use of ICT in classroom practice. According to results of the questionnaire only 39 of the classrooms had internet connection and in the interviewees participants complained about the filtering of MNE that were applied in schools. In this context it can be said that this finding is expectable.

According to 77 of the participants (%74,7), the third statement which was "More relevant software packages to choose from for my students" should be supported in order to facilitate ICT use in classroom practice. Using software in language learning has several benefits such as providing realistic, native-like language models in a variety of media and recording what the learners has achieved with an evaluation (Warschauer & Healey, 1998) The only software that can be used in language teaching is DynEd software which is currently compulsory for all levels of schools. Therefore it is obvious that there is a need for software packages in language teaching and learning and providing teachers with more software may facilitate ICT use.

Interestingly 65 of the participants (%63,1) said that "More training on how to use computer" which was the fourth statement would conduce to the use of ICT in classroom practice. The reason of that may be that participants believed that there were still teachers who did not know how to use computers because the participants reported high levels of confidence and competence and moreover they stated in the interviews that using computer in teaching did not require a higher level of computer skill.

"More training on pedagogy in implementing technology into classroom" was the fifth statement and 45 of the participants (%43,7) stated that support in this area would contribute to their use of ICT. In the light of previous findings, it can be said that more communicative use of ICT in classroom practice may be enabled by training EFL teachers on pedagogy may be useful as they were found to use ICT tools mainly for listening activities.

64 of the of the participants (%62,1) expressed that “More technician support in class” which was the sixth statement would facilitate ICT use in their teaching. It can be said that this finding is expected because the participants had marked lack of technician support in their schools as one of the factors that prevented them from using ICT tools in their teaching. Facing with technical problems in classroom is an unexpected condition for EFL teachers and thus giving more technician support in classrooms may increase the use of ICT use in the classroom environment.

According to 53 of the participants (%51,5) the seventh statement which was “More good examples to show how to successfully implement ICT in teaching English” would contribute to ICT use in classroom practice. One reason of this result may be that Interactive whiteboards are relatively new technology for teachers. Therefore if they are shown good examples of successful integration of interactive whiteboards they can use this technology more frequently and efficiently.

61 of the participants (%59,2) expressed that their use of ICT in their teaching would have been facilitated if there had been “More support from school leaders” which was the eighth statement. School managers are the decision makers and the authorities in the schools. For that reason if they support teachers to use ICT in their teaching, the frequency of ICT use in classroom practice may be increased.

“More encouragement from colleagues“ was the ninth statement and 39 of the participants (%37,3) stated that this statement would conduce to ICT use in classroom practice. In the light of this data the decisions of teachers may be affected by their colleagues and teachers who are unwilling to use ICT in their classroom practice may be motivated to use ICT by their colleagues.

44 of the participant reported that “More understanding from students and parents” which was the tenth statement would contribute to their ICT use. As mentioned before national tests in Turkey are mainly based on grammatical knowledge and EFL teachers are expected to help their students get high scores in these tests. For that reason using ICT tools in classroom practice may cause parents and students discomfort for the fear that they may get low scores in national exams

Similarly 54 of the participants (%52,4) marked the eleventh statement which was “Less stress from exams” as an area they wanted to get support. Generally teachers

in Turkey are qualified as good teacher or bad teacher according to results of their students' national exams. For that reason helping their students get high scores are important for them. This may put a pressure on EFL teachers and thus decreasing the pressure from exams may facilitate more frequent use of ICT in classroom environment.

43 of the participants (%41,7) stated that their use of ICT in their teaching would have been facilitated if there had been "Less homework to correct" which was the twelfth statement and "Less time in monitoring and administrating students" which was the thirteenth statement. Teachers are responsible for correcting the students' homework as well as monitoring and administrating them in each lesson. Considering that teachers have only 40 or 45 minutes for all of these responsibilities they may face with a time problem and there may not be time for using ICT in classroom practice.

"Students are provided proper training to use computers to learn" was the last statement and 51 of the participants (%49,5) of the participants expressed that this statement would contribute to ICT use in classroom practice. As mentioned in the interviews students can easily be distracted by ICT tools –especially by the Internet- during lessons. For that reason if students are provided with proper training on how to use computers for educational purposes, EFL teachers may use ICT in their teaching more frequently as they will not have to worry about distracted students.

When the areas EFL teachers in Artvin wanted to get support to use ICT more efficiently in classroom practice are analysed, it can be concluded that lack of budget is the underlying reason. A great majority of the participants expressed that more computer, more access to the Internet and more relevant software packages would enable them to use ICT more frequently in their teaching. Nevertheless lack of budget is a major obstacle to meeting the expectations of EFL teachers. As stated several time in this study, lack of budget is the main difficulty in schools and equipping classrooms with ICT tools is relatively expensive and cannot be afforded by schools. In order to overcome this problem FATIH Project has launched by MNE of Turkey. Unfortunately the installation of ICT tools is not being maintained at a rapid pace and requires time because of the scope of the project. When FATIH project is completed, the most of the problems stated by the teachers may be solved and the expectations of teachers may be met.

CHAPTER FIVE

5. CONCLUSION

Summary of the present study whose focus was the use of ICT in classroom practice by EFL teachers in Artvin is presented in this chapter. The research questions which are presented below was tried to be answered in this study:

1. What is the existing ICT environment in EFL classes in Artvin?
2. What are the ICT skills of EFL Teachers in Artvin?
3. What training is provided for teachers to integrate ICT into teaching?
4. How do EFL Teachers in Artvin use computers in their classroom practice?
5. What are the factors influencing EFL Teachers in Artvin to use computers in their classroom practice?

Following the summary of the answers of these research questions which were found out in the present study, some pedagogical implications and some educational implications are given in this chapter.

5.1. Summary

This study aimed at providing a general picture of ICT environment and ICT use of EFL teachers in Artvin. For that reason the existing ICT environment, the skills and training of EFL teachers, the current ICT use of EFL teachers, the factors influencing EFL teachers' ICT use, factors motivating EFL teachers to use ICT in their teaching, the factors preventing EFL teachers from using ICT in their teaching and the areas EFL teachers wanted to get supported were investigated. Both qualitative and quantitative data collection tools were used in this study. A questionnaire was used to gather quantitative data and qualitative data was collected through interviews. In order to carry out the study in Artvin, the written permission of Artvin Provincial Office of Ministry of National Education was obtained. Data was collected in seminar terms of the teachers.

Findings in this study show that most of the EFL teachers considered ICT as a valuable tool both for themselves and their students. Participants recognised the integration of technology into language classrooms as a necessity and reported high percentages of computer use.

The existing environment was found insufficient by the participants. They complained about lack of computers and computer classrooms, lack of access to computer classrooms and the Internet filter of MNE in schools. More than half of the participating EFL teachers were found to have training on ICT. Nevertheless the training EFL teachers had received focused on developing technological skills instead of developing pedagogical skills to integrate ICT tools into their teaching. Participants also reported high levels of ICT competency and confidence. Basic skills of computer literacy were seen adequate for the use of ICT tool in classroom environment by the participants. But they added that training was required for more complex use of ICT.

In terms of current ICT use in classroom practice, participants were found to use ICT tools in their teaching and have interest in developing their ICT skills. Their interest indicates that they are open to change and using technology in their teaching. According to the result of the present study EFL teacher used ICT mostly in classroom and home for explaining ne knowledge, drill and practice and presentation of work. This finding can be considered as an indication of EFL teachers' persistence of focusing grammar and traditional teaching methods. They stated that using technology in classroom practice help them meet the needs and expectations of today's children who had been grown with technology. The most common use of ICT tools was found to be for providing visuals, videos, games and songs. They participants also stressed the need of training to use ICT efficiently. Nevertheless lack of CALL knowledge was found among the participants. Moreover participants were found to use ICT for mainly non-communicative activities.

Both age and teaching experience was found to have effect on the use of ICT by EFL teachers in their teaching. It was found that the older and more experienced the teachers were the less they used ICT in their teaching. On the other hand gender, school type and school location were not found to influence EFL teachers' use of ICT.

In terms of factors motivating EFL teachers to use ICT in their teaching,

participants marked the benefits of using ICT to students and teachers, fun feature of ICT in teaching and learning process, motivating features of ICT, the opportunities of providing immediate feedback and authentic materials as the most motivating factors.

In terms of factors preventing EFL teachers from using ICT in their teaching, lack of technical support and encouragement, lack of computers and resources, heavy pressure of exams and unpreparedness of students to use ICT in classroom were marked by the participating EFL teachers in Artvin.

Finally in terms of the areas EFL teachers wanted to get supported, participants stated that that more computers, more access to the Internet and more relevant software packages would contribute their ICT use in the classroom practice positively. Participants also expressed throughout the study that lack of budget was an important obstacle for them and being allocated with more budget would help them equip their classrooms with ICT tools.

5.2. Pedagogical Implications

This study investigated EFL teachers' ICT use in their classroom practice, the factors that influence, motivate and prevent EFL teachers while using ICT and expectations of the EFL teachers to use ICT more efficiently in their teaching. The results of the present study indicate some pedagogical implications for MNE, policy-makers, school managements and EFL teachers.

Firstly, The results of this study showed that majority of the participants used ICT in their classroom practice and had interest in developing their skills in ICT although their ICT environment was not satisfactory which was stated by the participants as one of the preventing factors. It was observed that there was a lack of computers in most of the schools. Furthermore the Internet filter of MNE was stressed by the participants who said that the filter prevented them from visiting educational sites. As schools had limited budget they could not equip classrooms with ICT tools. Although FATIH project is still being carried out and the installation of ICT tools is being maintained, there is still a lack of hardware in the schools. Equipping classrooms ICT tools would improve the use of ICT in classroom practice.

Secondly, the study indicated that EFL teachers use ICT mainly for non-communicative purposes such as explaining new knowledge and drill and practice. This may be because of lack of CALL knowledge which was stated by the participants. Offering teachers pedagogical training on how to use ICT for communicative purposes and showing good examples of effective integration of technology to language learning and teaching may be a solution to this problem. Apart from pedagogical training, training on the most common technical issues faced in classrooms would help teachers in their use of ICT because lack of technical support was one of the most preventing factors.

Last implication of this study is to develop software and online materials for language learning and teaching. Participants expressed that their use of ICT in classroom environment would be facilitated by the relevant software packages and online materials. The only software EFL teachers can use freely is DynEd software whose efficiency is questioned by the teachers. Therefore developing efficient software designed especially for language learning and teaching may promote more communicative and effective use of ICT in classroom practice.

5.3. Further Research

The present research was carried out with 103 EFL teachers in Artvin. This study can be replicated with more participants or after FATIH Project is completed. Moreover this study can be carried out in different province of Turkey or throughout Turkey in order to provide a general picture of ICT use.

This study may also be repeated in higher education institutes with pre-service teachers in order to investigate the ICT use of pre-service teachers. As they are candidate teachers their attitudes, skills and knowledge in ICT is of crucial importance.

As lack of training was detected in the present study, another study can be conducted after a proper training on how to integrate ICT in their teaching was offered to teachers in order to investigate the effect of training on the use ICT in classroom practice.

Finally similar studies may be carried out with language learning students in order to examine their ICT use. By investigating language students' ways of ICT use,

policy makers and educational material developers may develop curricula and materials in which benefits of using ICT is stressed.

REFERENCES

Abu Naba'h A. M. (2012). The impact of computer assisted grammar teaching on EFL pupils' performance in Jordan. International Journal of Education and Development using Information and Communication Technology, 8, 1, 71-90.

Abu-Seileek, A. F., & Abu-Sa'aleek, A. O. (2012). Computer Assisted Language Learning: Merits and Demerits. Language in India, 12, 4, 31-44.

Açıkalın, M. (2009). Pre-service elementary teachers' beliefs about use of the Internet in the social studies classroom.European Journal of Teacher Education, 32, 3, 305-320.

Acun, İ., Demir, M. & Göz. N.L. (2010). Öğretmen adaylarının vatandaşlık yeterlilikleri ve eleştirel düşünme becerileri arasındaki ilişki. Journal of Social Studies Education Reserch, 1, 1, 107- 123.

Aghaei, S., Nematbakhsh, M. A., & Farsani, H. K. (2012). Evolution of the World Wide Web: From Web 1.0 to Web 4.0. *International Journal of Web & Semantic Technology*, (*3).*1. Retrieved from: http://airccse.org/journal/ijwest/papers/3112ijwest01.pdf

Ahmad K., Corbett G., Rogers M., & Sussex R. (1985). Computers, language learning and language teaching. Cambridge: Cambridge University Press.

Akkoyunlu, B. & Kurbanoğlu, S. (2004). A study on teacher candidates' perceived information literacy self-efficacy and perceived computer self-efficacy. Hacettepe University Journal of Education, 27, 11-20.

Albirini, A. (2006). Teachers' attitudes toward information and communication technologies: The case of Syrian EFL teachers. Computers & Education, 47(4),

Aoki, H., Kim, J. & Lee, W. (2013). Propagation & level: Factors influencing in the ICT composite index at the school level. Computers and Education, 60, 1, 310-324.

Árias Soto, L. D., Buitrago Escobar, Z. R., & Pineda Báez, C. (2011). ICT in the professional development of EFL teachers: Perceptions and challenges. Universidad Pedagógica Nacional.

Avidov-Ungar, O. & Shmir-Inbal, T. (2013). Empowerment Patterns of Leaders in ICT and School Strengths following the Implementation of National ICT Reform. Journal of Information Technology, 12. Retrieved from: http://www.jite.org/documents/Vol12/JITEv12ResearchP141-158Avidov1228.pdf.

Aypay, A., Celik, H. C., Aypay, A, & Sever, M. (2012) Technology acceptance in education: A study of pre-service teachers in Turkey. The Turkish Online Journal of Educational Technology, 11, 4, 264-272.

Badia, A., Meneses, J., & Sigalés, C. (2013). Teachers' perceptions of factors affecting the educational use of ICT in technology-rich classrooms. Electronic Journal of Research in Educational Psychology, 11, 3, 787-808 DOI: http://dx.doi.org/10.14204/ejrep.31.13053

Baek, Y., Jung, J., & Kim, B. (2008). What makes teachers use technology in the classroom? Exploring the factors affecting facilitation of technology with a Korean sample. Computers & Education, 50, 224-234.

Bani Hani, N.(2009). Designing an English computerized instructional program for Jordanian sixth grade students and measuring its effect on their achievement. Unpublished Doctoral Dissertation, Yarmouk University, Irbid, Jordan.

Beatty, K. (2003). Teaching and researching computer-assisted language learning. New York: Longman.

Beggs, T. A. (2000). 'Influences and barriers to the adoption of instructional technology'. Paper presented at Mid-South Instructional Technology Conference proceedings, Murfreesboro, TN.

Bonifaz, A., & Zucker, A. (2004). Lessons Learned About Providing Laptops for All Students. Northeast and the Islands Regional Technology in Education Consortium. Retrieved from: http://www.t1t.net/researches/pc/15.pdf

Bonk, C. J. & Graham, C. R. (Eds.). (2004). Handbook of blended learning: Global Perspectives, local designs. San Francisco, CA: Pfeiffer Publishing.

Bozdoğan, D., & Özen, R. (2014). Use of ICT technologies and factors affecting pre-service ELT teachers' perceived ICT self-efficacy. The Turkish Online Journal of Educational Technology, 13(2), 186-196.

Braul, B. (2006). ESL teacher perceptions and attitudes toward using computer-assisted language learning (CALL): Recommendations for effective CALL practice. Unpublished master's thesis, University of Alberta, Edmonton, Alberta, Canada.

Bryant, T. (2006). Social Software in Academia. Educause Quarterly, 29(2). Retrieved from: https://net.educause.edu/ir/library/pdf/eqm0627.pdf

Butler-Pascoe, M. E. (2009). English for specific purposes (ESP), innovation and technology. *English Education and ESP*, pp. 1–15

Cabrini Simões, L. (2007). An overview on the use of new technologies in English language teaching. Acta Scientiarum. Human and Social Sciences, 29(1), 31-34

Cambpell-Kelly, M., & Aspray, V. (1998). Computer: A History of the Information Machine. IEEE Annals of the History of Computing, 20, 2, 86-7.

Chan Nim P., & Jeong-Bae S. (2009). *Implementing computer-assisted language learning in the EFL classroom: teachers' perceptions and perspectives.* International Journal of Pedagogies and Learning, 5, 2, 80-101.

ChanLin, L. J., Hong, J. C., Horng, J. S., Chang, S. H., & Chu, H. C. (2006). Factors influencing technology integration in teaching: A Taiwanese perspective. Innovations in Education and Teaching International, 43, 1, 57-68.

Chen, W., Tan, A., & Lim C. (2012). Extrinsic and intrinsic barriers in the use of ICT in teaching: A comparative case study in Singapore. In M. Brown, M. Hartnett & T. Stewart (Eds.), Proceedings of ASCILITEAustralian Society for Computers in Learning in Tertiary Education Annual Conference, Wellington, 2012 (pp. 191-196).

Claudio de Paiva, F. (2013). Understanding digital natives' learning experiences. Revista Brasileira de Linguística Aplicada, 13, 2, 643-658. Retrieved from http://www.scielo.br/pdf/rbla/v13n2/aop0513.pdf

Coghlan, B. F. (2004). Addressing the barriers to technology interaction: A case study of a rural school. Unpublished Doctoral Dissertation, Department of Curriculum and Instruction, Mississippi State University, Mississippi.

Copriady, J. (2012). Self- Motivation as a Mediator for Teachers' Readiness in Applying ICT in Teaching And Learning. Turkish Online Journal of Educational Technology, 13, 4, 115-123.

Cornu, B.(2011). Digital natives: how do they learn? How to teach them?. Moscow: UNESCO Institute for Information Technologies in Education.

Corrêa, D.M. (2001). New technologies in teaching and learning English. In: M.B.M. Fortkamp & R.P. Xavier (Eds.), EFL Teaching and learning in Brazil: theory and practice. (pp. 211-222). Florianópolis: Insular.

Cox, M.J., Preston, C., & Cox, K. (1999) What Motivates Teachers to use ICT?. Paper presented at the British Educational Research Association Conference. Brighton. September

Creswell, J. W. (2012). Qualitative inquiry and research design: Choosing among the five traditions (3rd ed.). Thousand Oaks, CA: Sage.

Davies G., Walker R., Rendall H. & Hewer S. (2011). Introduction to Computer Assisted Language Learning (CALL). Module 1.4 In Davies G. (ed.) Information and Communications Technology for Language Teachers (ICT4LT), Slough: Thames Valley University

Demirel, O. (1997). Program Development in Education. Ankara: Pegem A Press.

Doyle, L., Brady, A., & Byrne, G. (2009). An overview of mixed methods research. Journal of Research in Nursing, 14, 2, 175–185.

Drent, M. & Meelissen, M. (2008). Which factors obstruct or stimulate teacher educators to use ICT innovatively?. Computers and Education, 551, 1, 187-199.

Dunn, K. (2005). Interviewing. In I. Hay (Ed.), Qualitative research methods in human geography (pp. 50 – 82). Oxford: Oxford University Press.

eBİZ MBA. (2015a). The Most Popular Social Networking Sites. Retrieved From: http://www.ebizmba.com/articles/social-networking-websites

eBİZ MBA. (2015b). The Most Popular Web 2.0 Sites. Retrieved From: http://www.ebizmba.com/articles/web-2.0-websites

Ebrahimi, N.A., Eskandari, Z., & Rahimi, A. (2013). The effect of using technology and the internet on some Iranian EFL students'perceptions of their communication classroom environment. Teaching English with Technology, 13 (1), 3-19.

European Commission. (2015). Digital Agenda for Europe. Retrieved from: http://ec.europa.eu/digital-agenda/en/digital-agenda-europe-2020-strategy

Evers, H. (2003). Transition towards a Knowledge Society: Malaysia and Indonesia in Comparative Perspective. Comparative Sociology, 2, 1, .355-373.

Fang, X., & Warschauer, M. (2004). Technology and curricular reform in China: A case study. TESOL Quarterly, 38, 2, 301-321.

Farley, M. (2007). Web 2.0, wikis, and the IP Community. Journal of Intellectual Property Law & Practice, 2 (4): 251-257 first published online March 8, 2007doi:10.1093/jiplp/jpm005

Fiktorius, T. (2013) Exploring ICT Integration in Foreign Language Teaching and Learning in an Indonesian Senior High School: Learners' voice. Retrieved From: https://www.academia.edu/3852733/Exploring_ICT_Integration_in_Foreign_Language_Teaching_and_Learning_in_an_Indonesian_Senior_High_School_Learners_voice

Fotos, S. (ed.). Multimedia Language Teaching, (pp. 3-20). Tokyo: Logos.

Fu, J. (2013). ICT in Education: A Critical Literature Review and Its Implications. International Journal of Education and Development using Information and Communication Technology, 9, 1, 112-125.

Garret, N. (2009). Computer-Assisted Language Learning Trends and Issues Revisited: Integrating Innovation. Modern Language Journal, 93, 1, 719-740.

Garrison, R. & *Kanuka,* H. (*2004*). Blended learning: Uncovering it transformative potential in higher education. The Internet and Higher Education, 7(2), 95-105.

Gips, A., Di Mattia, P., & Gips, J 2004, 'The effect of assistive technology on educational costs: Two case studies', in K. Miesenberger, J. Klaus, W. Zagler, D. Burger (eds.), Computers Helping People with Special Needs, Springer. pp. 20-213.

Glassett, K., & Schrum, L. (2009). Teacher beliefs and student achievement in technology-rich classroom environments. International Journal of Technology in Teaching and Learning, 5(2), 138-153.

Goktas, Y., Yildirim, S. and Yildirim, Z. 2009., Main barriers and possible enablers of ICT integration into pre-service teacher education programs. Educational Technology and Society, 12, 193-204.

Graham, P. (2005). Web 2.0. Available at: http://paulgraham.com/web20.html.

Gray, D.E. (2004) Doing Research in the Real World. London: Sage.

GsSCI. (2011). ICT, Education, Development, and the Knowledge Society. African Leadership in ICT Program. Retrieved From: http://www.gesci.org/assets/files/ICT,%20Education,%20Development,%20and%20the%20Knowledge%20Society(1).pdf

Gülbahar, Y. (2008a). ICT Usage in Higher Education: A Case Study on Preservice Teachers and Instructors. The Turkish Online Journal of Educational Technology, 7, 1, Article 3.

Gülbahar, Y. (2008b). Improving the Technology Integration Skills of Prospective Teachers Through Practice: A Case Study. The Turkish Online Journal of Educational Technology, 7, 4, Article 8.

Gülbahar, Y., & Güven, I. (2008). A Survey on ICT Usage and the Perceptions of Social Studies Teachers in Turkey. Educational Technology & Society, 11 (3), 37-51.

Gündüz, N. (2005). Computer Assisted Language Learning (CALL). Journal Of Language And Linguistic Studies. 51.

Haddad. D. W., & Jurich. S. (2001). ICT for education: Potential and potency: International leadership for educational technology. Retrieved from: http://unesdoc.unesco.org/images/0011/001191/119129e.pdf

Hämäläinen, R. & Cattaneo, A. (2015). New TEL Environments for Vocational Education - Teacher's Instructional Perspective. Vocations and Learning: Studies in vocational and professional education. Vocations and Learning, 8, 2, 135-157.

Han, W. (2008). Benefits and barriers of computer assisted language learning and teaching. US-China Foreign Language, ISSN1539-8080, USA, 6, 9, 40-43.

Hani Bani, N. A. (2014). Benefits and Barriers of Computer Assisted Language Learning and Teaching in the Arab World: Jordan as a Model. Theory and Practice in Language Studies, 4, 8, 1609-1615

Harrell, M.C. & Bradley, M.A. (2009). Data collection methods: Semi-structured interviews and focus groups. Santa Monica, CA: RAND Corporation. Retrieved from: http://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR718.pdf

Heaney, L. F. (2012). Promoting language learning in the primary classroom and beyond: A case study. Gifted Education International, 28, 2, 161-170.

Hendler, J. (2010). Web 3.0: The Dawn of Semantic Search. IEEE Xplore, January 2010, pages 77-80, Retrieved from: http://www.computer.org/cms/Computer.org/ComputingNow/homepage/2010/0210a/rW_CO_Web3.pdf

Hennessy, S., Ruthven, K., & Brindley, S. (2005). Teacher perspectives on integrating ICT into subject teaching: Commitment, constraints, caution and change. *Journal of Curriculum Studies*, 37(2), 155-192

Hismanoglu, M. (2012). Prospective EFL Teachers' Perceptions of ICT Integration: A Study of Distance Higher Education in Turkey. Educational Technology & Society, 15 (1), 185–196.

Hu, Z., & McGrath, I. (2011). Innovation in higher education in China: Are teachers ready to integrate ICT in English language teaching?. Technology, Pedagogy and Education, 20, 1, 41-59.

Hue LK. Y., & Ab Jalil, H. (2013). Attitudes towards ICT Integration into Curriculum and Usage among University Lecturers in Vietnam. *International Journal of Instruction*. 6, 2, 53-66.

International Telecommunication Union. (2014). ICT Facts and Figures. Geneva: Switzerland. Retrieved from: https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2014-e.pdf

Jewell, M. (2006). Real-world contexts, skills and service learning for secondary school language learners In Hanson-Smith, H., & Rilling, S. (Eds), Learning language through technology, (pp. 175-186) Alexendria, VA: TESOL.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. Educational Researcher, 33, 7, 14-26.

Jones, C., & Fortescue, S. (1987). Using computers in the language classroom. London: Longman.

Kamel Boulos M, N., Maramba, I. & Wheeler .S (2006). Wikis, blogs and podcasts: a new generation of Web-based tools for virtual collaborative clinical practice and education. BMC Medical Education, 6 (41).

Kern, R. (2006). Perspectives on Technology in Learning and Teaching Languages. TESOL Quarterly, 40, 1, 183-210.

Lai, C. C., & Kritsonis, W. A. (2006). The advantages and disadvantages of computer technology in second language acquisition. Doctoral Forum. 3, 1, 1-6.

Larsen-Freeman, D., Andersen, M. (2011). Techniques and principles in language teaching (3rd ed.). Oxford: Oxford University Press.

Lee, K. (2000). English Teachers' Barriers to the Use of Computer-assisted Language Learning. The Internet TESL Journal. Retrieved from: http://iteslj.org/Articles/Lee-CALLbarriers.html

Levy, M. (1997). CALL: Context and Conceptualisation. Oxford: Oxford University

Levy, M. (2009). Technologies in Use for Second Language Learning. Modern Language Journal, 93, 1, 769-782

Li, L. & Walsh S. (2010). Technology uptake in Chinese EFL classes. *Language Teaching Research*, *15*, 1, 99-125.

Lu, M. (2006). Effectiveness of vocabulary learning via mobile phone. 3rd PacCALL conference. Nanjing, China.

McGrail, E. (2005), Teachers, technology, and change: English teachers' perspectives. Journal of Technology and Teacher Education, 13, 1, 5-14.

McNamara, C. (1999) General Guidelines for Conducting Interviews. Authenticity Consulting, LLC. From:http://managementhelp.org/businessresearch/ interviews. htm

Meng, P. (2005). Podcasting and Vodcasting. University of Missouri IAT Services White Paper.

Merc, A. (2015). Using Technology in the Classroom: A Study with Turkish Pre-Service EFL Teachers. The Turkish Online Journal of Educational Technology, 14, 2, 229-240.

Mike, D. (1996). Internet in the schools: A literacy perspective. Journal of Adolescent and Adult Literacy, 40, 1, 1-13.

Ministry of Development. (2014). ICT investments in Public Establishments. Retrieved from: http://www.bilgitoplumu.gov.tr/Documents/1/Diger/KAMU_BIT_YATIRIMLARI_2014.pdf

Ministry of National Education. (2012). FATIH Project. Retrieved from: http://fatihprojesi.meb.gov.tr/tr/english.php

Ministry of National Education. (2015). Press Release. Retrieved from: http://www.meb.gov.tr/press-release/haber/8098/en

Moore, Z., Morales, B., & Carel., (1998). Technology and teaching culture: Results of a state survey of foreign language teachers. CALICO Journal,. 5, 1-3, 109-128.

Mumtaz, S. (2000). Factors affecting teachers' use of information and communications technology: A review of the literature. Journal of Information Technology for Teacher Education, 93, 319–41.

Naik, U. & Shivalingaiah, D. (2008). Comparative Study of Web 1.0, Web 2.0 and Web 3.0. 6th International CALIBER, University of Allahabad, Allahabad.

Newton, N. (2010). The use of semi-structured interviews in qualitative research: strengths and weaknesses. Retrieved from: https://www.academia.edu/1561689/The_use_of_semi-structured_interviews_in_qualitative_research_strengths_and_ weaknesses

OECD. (2005). *Teachers matter. Attracting, developing and retaining effective teachers – Final Report: Teachers Matters.* Overview. France: OECD Publications.

Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning systems: Definitions and directions. Quarterly Review of Distance Education, 4(3), 227–234.

Ozad, E. B., & Kutoglu, U. (2004). EFL Students Use of Technology in the Presentations. The Turkish Online Journal of Educational Technology, 3, 2, 16-20.

Ozerol, G. (2009). Perception of EFL primary school teachers towards CALL. Unpublished MA Thesis, Cukurova University, Adana, Turkey.

Peacock, M. (2013). Foreword In Peacock, M. (Ed.), Innovations in learning technologies for English language teaching. London: British Council Innovation Series.

Pelgrum, W. J. (2001). Obstacles to the integration of ICT in education: results from a worldwide educational assessment. Computers & Education, 37(2), 163-178.

Phillips, M. (1987). Communicative language learning and the microcomputer. London: British Council.

Player-Koro, C. (2012). Hype, Hope and ICT in Teacher Education. A Bernsteinian Perspective. *Learning Media And Technology*, 1-15.

Prensky, M. (2001). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.

Prestridge, S. (2012). The beliefs behind the teacher that influences their ICT practices. Computers & Education, 58, 449–458.

Rahimi, M., &Yadollahi, S. (2011).Computer anxiety and ICT integration in English classes among Iranian EFL teachers.Procedia Computer Science, 3, 203-209.

Riasati, M.J., Allahyar, N., & Tan, K-E. (2012). Technology in language education: Benefits and barriers. Journal of Education and Practice, 3, 5, 25-30.

Richards, J. C. & Rodgers, T. (2001). Approaches and Methods in Language Teaching (2nd Ed.). Cambridge University Press.

Romano, M. T. (2003). Empowering teachers with technology: Making it happen. Oxford: Scarecrow Press.

Royal Society. (2012). Shut down or restart? The way forward for computing in UK schools. Retrieved from: https://royalsociety.org/%20education/policy/computing-in-schools/report/

Rubio, R., Martín, S., & Morán, S. (2010). Collaborative web learning tools: Wikis and blogs. Computer Applications in Engineering Education, 18, 3, 502-511.

Şahin-Kızıl, A. EFL teachers attitudes towards Information and Communication technologies (ICT). 5th International Computer & Instructional Technologies Symposium 22-24 September 2011, Elazığ, TURKEY.

Salaberry, M. R. (2001). The use of technology for second language learning and teaching: A Retrospective. The Modern Language Journal, 85, 1, 39-56.

Sang G. Y., Valcke M., van Braak J., Tounder J., & Zhu C. (2011). Predicting ICT integration into classroom teaching in Chinese primary schools: exploring the complex interplay of teacher-related variables. Journal of Computer Assisted Learning, 27, 160–172.

Shyamlee, S. D., Phil, M. (2012). Use of technology in English language teaching and learning: an analysis. International Proceedings of Economics Development and Research, 33, 150-156.

Singhal, M. (1997). The internet and foreign language education: Benefits and challenges, the Internet TESL Journal, 3, 6 Retrieved From: http://iteslj.org/Articles/Singhal-Internet.html

Sipilä, K. (2011) "No pain, no gain? Teachers implementing ICT in instruction", Interactive Technology and Smart Education, 8, 1, 39 – 51.

Sipilä, K. (2013). No pain, no gain? Educational use of ICT in teaching, studying and learning processes: teachers' and students' views. Thesis. http://urn.fi/URN:ISBN:%20978-952-484-695-0

Smith & Hanson, E. (2000), Technology-Enhanced Learning Environments, USA: TESOL Inc.

Solmaz, O. (2011). The Use of Information and Communicatıon Technologies (ICT) by High School EFL Teachers for Personal and Professional Development. Unpublished Master's thesis Dicle University.

Stuart, L. H., Mills, A. M., & Remus, U. (2009). School leaders, ICT competence and championing innovations. Computers and Educations, 53(3), 733-741.

Tasir, Z., El Amin Abour K. M., Abd Halim, H. D., & Harun J. (2012). Relationship between teachers' ICT competency, confidence level, and satisfaction toward ICT training programmes: A case study among postgraduate students. Turkish Online Journal of Educational Technology, 11, 1, 138-144.

Tezci, E. (2009). Teachers' effect on ICT use in education: The Turkey sample. Procedia-Social and Behavioral Sciences, 1(1), 1285-1294.

The Commonwealth of Learning. (2000) An Introduction to Open and Distance Learning. Retrieved from: http://oasis.col.org/bitstream/handle/11599/138/ODLIntro.pdf?sequence=1&isAllowed=y

The EU Framework Programme for Research and Innovation. (2011). Horizon 2020. Retrieved From: http://ec.europa.eu/programmes/horizon2020/en/official-documents

The European Centre for the Development of Vocational Training. (2006). ICT skills certification in Europe. Luxembourg: Office for Official Publications of the European Communities.

The Linux Information Project. (2005). Internet Definition. Retrieved from: http://www.linfo.org/internet.html

The University of Melbourne. (2008). Wikis, Blogs & Web 2.0 technology. University of Copyright Office. Retrieved from: http://www.unimelb.edu.au/copyright/information/guides/wikisblogsweb2blue.pdf

Thorne, S. L., Sauro, S., & Smith, B. (2015). Technologies, Identities, and Expressive Activity. Annual Review of Applied Linguistics, 35, 215-233

Timucin, M. (2006). Implementing CALL in the EFL context. ELT Journal, 60, 3, 262–271

Tinio, V. L. (2003). ICT in Education. United Nations Development Programme-Asia Pacific Development Information Programme.

Tondeur J., Van Keer H., van Braak J. & Valcke M. (2007) ICT integration in the classroom: challenging the potential of a school policy. Computers & Education, 51, 212–223.

Tondeur, J., Hermans, R., van Braak, J., & Valcke, M. (2008). Exploring the link between teachers educational beliefs profiles and different types of computer use in the classroom: The impact of teacher beliefs. Computers in Human Behavior, 24, 6, 2541-2553.

Turkish Informatics Industry Association. (2014). ICT Industry 2013 Marketing Data. Retrieved from: http://www2.deloitte.com/content/dam/Deloitte/tr/Documents/technology-media-telecommunications/tr-tubisad-pazar-veri-raporu.pdf

Turkish Statistical Institute (2014). ICT usage survey on household and individuals 2014. Retrieved from: http://www.tuik.gov.tr/PreTablo.do?alt_id=1028

Underwood J. (1984) Linguistics, computers and the language teacher: a communicative approach, Rowley, MA: Newbury House.

UNESCO Asia and Pacific Regional Bureau for Education. (2004). Guidebook 1 - ICTs in Education and Schoolnets. Retrieved from: http://www.unescobkk.org/ fileadmin/user_upload/ict/e-books/SchoolNetKit/guidebook1.pdf

UNESCO Asia and Pacific Regional Bureau for Education. (2010). ICT Transforming Education: A Regional Guide. Bangkok: UNESCO. Retrieved from: http://unesdoc.unesco.org/images/0018/001892/189216e.pdf

UNESCO. (2005). Towards Knowledge Societies. Paris: UNESCO. Retrieved from: http://unesdoc.unesco. org/images/0014/001418/141843e.pdf

Varol, F. (2013). Elementary School Teachers and Teaching with Technology. TOJET: The Turkish Online Journal of Educational Technology, 12, 3, 85-90.

Virtual College. (2015). What is e-learning?. Retrieved from: http://www.virtual-college.co.uk/elearning/elearning.aspx

Voogt, J. (2012). ICTs for Curriculum Change. UNESCO Institute for Information Technologies in Education. Policy Brief.

Wang, D. (2012). CALL and Traditional Instructions for Chinese Beginners: A Quantitative Research. Journal of Technology and Chinese Language Teaching in The U.S. China Social Science Press, pp. 383-394.

Wang, M. J. (2014). The current practice of integration of information communication technology to English teaching and the emotions involved in blended learning. Turkish Online Journal of Educational Technology, 13, 3, 188.

Warschauer, M. (1995). E-mail for English teaching: Bringing the Internet and computer learning networks into the language classroom. Alexandria, VA: TESOL Publications.

Warschauer, M. (1996). Computer-assisted language learning: An introduction. In

Warschauer, M. (2004). Technological change and the future of CALL. In S. Fotos & C. Brown (Eds.), *New Perspectives on CALL for Second and Foreign Language Classrooms* (pp. 15-25). Mahwah, NJ: Lawrence Erlbaum Associates

Warschauer, M. (2012). The digital divide and social inclusion. *Americas Quarterly,* 130-135.

Warschauer, M., & Grimes, D. (2007). Audience, authorship, and artifact: The emergent semiotics of Web 2.0.*Annual Review of Applied Linguistics*, *27*, 1-23.

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. Language Teaching, 31(2), 57-71.

Warschauer, M., & Meskill, C. (2000). Technology and second language teaching and learning. In J. Rosenthal (Ed.), Handbook of Undergraduate Second Language (pp.303-308). Mahwah: New Jersey, Lawrance Elbraum.

Welsh, E., Wanberg, C., Brown, K., & Simmering, M. (2003) E-learning: Emerging uses, empirical results and future directions. International Journal of Training and Development, 7, 4, 245-258.

Yang, Y. (2010). Computer-assisted Foreign Language Teaching: Theory and Practice. Journal of Language Teaching and Research, 1, 6, 909-912.

YASED International Investors Association. (2012). Information and Communication Technologies on the Road to 2023. Istanbul.

Young, S. S. C. (2003). Integrating ICT into second language education in a vocational high school. Journal of Computers Assisted Learning, 19, 447-461.

Zhao, Y. (2003). Recent development in technology and language: A literature review and meta-analysis. CALICO Journal, 21, 7–27.

APPENDICES

Appendice A: QUESTIONNAIRE

PART 1 You and Your Teaching Experience

Please tick the appropriate answers if applicable

1. Gender Male ☐ Female ☐

2. Age 20–25 ☐ 26–35 ☐ 36–45 ☐ 46–55 ☐

3. Which of the following educational qualifications or degrees do you have?
Bachelors Degree ☐ Masters Degree ☐
PhD ☐ Other (Please specify) _____

4. How long have you been teaching English (including probationary period)?
1–5 years ☐ 6–10 years ☐ 11–20 years ☐
20–30 years ☐ More than 30 years ☐

5. What level(s) are you currently teaching? (Please tick all that apply)
Pre-School ☐ Primary School ☐
Secondary School ☐ High School ☐

6. How many classes do you teach? _____

7. What is the average number of students in your class?
Less than 15 ☐ 15–20 ☐ 20–30 ☐ 30+ ☐

8. How many English teachers are there in your school?
Less than 2 ☐ 2–5 ☐ 5–7 ☐ 7–10 ☐ 10+ ☐

9. What is the location of your current school?
Rural ☐ Town ☐

PART 2 ICT Environment

Section A: In Teachers' Room

1. Do you own a computer? Yes ☐ (Go to Q1a) No ☐ (Go to Q2) Is your computer connected to Internet?
Yes ☐ No ☐

2. Do you have access to a computer in your office?
Yes ☐ (Go to Q2a) No ☐ (Go to Q3)

2a. Is the office computer connected to the Internet? Yes ☐ No ☐

Section B: In your Classroom

3. Are there any computers in your classroom?
   Yes ☐ (Go to Q2) No ☐ (Go to Q4)

   3a. How many computers are there in your classroom? _____

   3b. Are **all** of the computers connected to Internet? Yes ☐ No ☐
   *If no, how many computers **are** connected to Internet?* _____

   3c How often is the computer(s) in your classroom used? (*Tick one box only*)

Daily	☐	Monthly	☐
2–3 times per week	☐	Once per term	☐
Weekly	☐	1–2 times per year	☐
Fortnightly	☐	Never	☐

Section C: In your School

4. Are there any "Multimedia Classrooms" or "Computer Classrooms" in your school?
Yes ☐ No ☐ (*Please go to Part 3*).

4a. How many "Computer Classroom" are there in your school? _____
4b. How many computers are there in a "Computer Classroom"? _____
4c. Do "Computer Classrooms" have access to the Internet?
Yes ☐ No ☐

4d. Are English teachers free to use the "Computer Classrooms" in your school at anytime as they want?
Yes ☐ No ☐ (*Please explain* _____)

PART 3 Your Skill and Training in ICT

1. Have you received any training of ICT?
Yes ☐ (Go to Q3) No ☐ Can't remember ☐

2. Are you interested in developing your skills and knowledge in ICT?
Yes ☐ No ☐ (Go to Part 4)

3. What was the focus of the training you received? (Please tick all that apply)
Word processing ☐ Databases ☐ Spreadsheets ☐
Presentation skill ☐ Internet ☐ Webpage Design ☐
E-mail ☐ Courseware Design or Making ☐ Other _____

PART 4 Use of ICT

1. Have you obtained any ICT Certificate ?
Yes ☐ No ☐

2. Do you use computers in your role as a teacher?
   Yes ☐ (Go to Q3.) No ☐ (*Go to Q8*.)

3. Where do you generally use ICT resources? *(Tick all that apply*)
☐ Classroom ☐Computer lab ☐ Library ☐ Home
   Office ☐ Other (please specify) _____

4. What do you use ICT for in teaching? (*Tick all that apply*)
   Explain new knowledge ☐ Student self-support learning ☐
   Student individual or collaborative project ☐ Presentation of work ☐
   Drill and practice ☐ Other, *please specify*
   _____

5. If you use ICT, how would you describe your general level of ICT **competence** in the following contexts?

	Very competent	Competent	Not competent	Unsure
Classroom practice				
Professional development				
Personal use				
Administration				

6. If you use ICT, how would you describe your general level of ICT **confidence** in the following contexts?

	Very confidence	Confident	Not confident	Unsure
Classroom practice				
Professional development				
Personal use				
Administration				

7. What motivates you to adopt ICT into classroom practice?

	Yes
ICT helps me to change the way I teach	
I am forced to adopt ICT into teaching	
All my colleagues are keen to use ICT in teaching	
It is becoming a trend to use ICT in teaching	
I like innovation	
Language learning will become easy by using ICT	
Our school is very supportive in using ICT in classroom	
Everyone is equipped with a computer for using in classroom.	
I am expected to use ICT in the classroom	
ICT reduces my workload	
We are trained to use technology in classroom	

It is easy to get a teaching reward when you teach using ICT	
ICT makes the lessons more interesting	
Children who do not like learning are motivated by ICT	
Using ICT makes teaching enjoyable	
Learning becomes great fun when using ICT	
Using ICT allows me to present work to students which looks nicer than on the blackboard	
ICT helps make administration more efficient	

ICT provides numerous authentic materials for language learning	
The interaction between teachers and students is becoming more when ICT is used	
There are lots of software packages available for me to use in teaching English to my students	
I am good at using ICT, so I would like to try using it for teaching purpose	
ICT helps students to practice grammar with immediate feedback	

8. What prevents you from adopting ICT into classroom practice?

	Yes
I have difficulty in using the computer myself	
I don't know how to integrate ICT in my teaching	
I am not confident enough to use computer in front of my students	
I don't have a computer to use in teaching	
I can't find any relevant software packages	
I don't have time to prepare a lesson using ICT	
There are not enough electronic resources	
Lack of encouragement from school leaders	
Lack of technician support in my school	
Lack of student computers which can be used in the classroom	
Lack of access to a computer lab	
Lack of skills to develop courseware for my students	
Students are not well-prepared to use ICT in class	
It will distract students' attention from learning.	
Lack of integration model to learn from	
Lack of CALL training	
I don't think ICT can really make a difference to language learning	
Heavy pressure of exams	
Students' negative attitudes towards using a computer to learn	
It reduces speaking time; therefore, it's not good for language learning	
I don't want to be different from other teachers	

9. In what area would you like to get support to facilitate (better) ICT integration into classroom practice?

	Yes
More computers that can be used in classroom	
More access to Internet or local network	
More relevant software packages to choose from for my students	

More training on how to use computer	
More training on pedagogy in implementing technology into classroom	
More technician support in class	
More good examples to show how to successfully implement ICT in teaching English	
More support from school leaders	
More encouragement from colleagues	
More understanding from students and parents	
Less stress from exams	
Less homework to correct	
Less time in monitoring and administrating students	
Students are provided proper training to use computers to learn	

Other Comments

Please use this space for any additional comments.

I will be following up this survey with in-depth interviews looking further at teachers' experience of ICT and what teachers perceive to be the important issues. If you are interested in this, please tick the box below, providing your name, current school and telephone number.

☐ I am interested in taking part in the interviews.

Name _____School _____Telephone number _____ E-mail _____

Thank you very much for your assistance.

Appendice B: INTERVIEW QUESTIONS

1. What do you think of integration of the computers in your school?
2. How important do you think adopting technology in language teaching?
3. What will be the use of computer in classrooms? Who do you think benefit more?
4. What skills and ability of technology do you think essential in order to manage to use in teaching?
5. Do you think that are there any differences between teaching with technology and without technology?
6. What does ‘computer-assisted language learning’ mean to you?
7. In your working environment, is there any support for teachers wishing to use technology in teaching? What kind of support, if any?
8. Have you ever used computers or any technology in your language teaching? In what ways?

Appendice C: CONSENT OF MINISTRY OF NATIONAL EDUCATION

T.C.
ARTVİN VALİLİĞİ
İl Milli Eğitim Müdürlüğü

Sayı : 79143383/605.01/6369036 19.06.2015
Konu: Araştırma Çalışmaları

VALİLİK MAKAMINA

İlgi : a) Batuhan SELVİ'ye ait 12/06/2015 tarihli dilekçe.
b) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğü 2012/13 nolu genelge.

Atatürk Üniversitesi Eğitim Bilimleri Enstitüsü İngiliz Dili Eğitimi Anabilim Dalında yükseklisansını yapmakta olan Batuhan SELVİ ilgi dilekçesinde, ilimiz bilgisayar öğretmenlerine yönelik ***"Bilgisayar ve İletişim Teknolojilerinin İngilizce Öğretmenleri Tarafından Kullanımı"*** konulu tez çalışması yapma isteği bildirilmiştir.

Söz konusu çalışmanın ilgi(b) genelge doğrultusunda yapılması müdürlüğümüzce uygun görülmüştür.

Makamlarınızca da uygun görüldüğü takdirde olurlarınıza arz ederim.

Gürsel SEÇKİN
Müdür a.
Şube Müdürü

OLUR
19.06.2015

Abdulcelil KAHVECİ
Vali a.
Milli Eğitim Müdür V.

Artvin İl MEM
Elektronik Ağ: www.artvinmem.gov.tr
e-posta: istatistik08@meb.gov.tr

Ayrıntılı bilgi için: Selma ODABAŞ (V.H.K.İ)
Tel: (0466)212 59 51
Faks: (0 466) 212 36 18

Appendix D: SAMPLE TRANSCRIPTION

DATE: 18.06.2015

Interviewer: Hello my name is Batuhan Selvi. You know in the scope of our study you filled a questionnaire. And you declared interest in participating in the interviews. If you are still interested in taking part in the interviews I have a few questions for you.

Participant: Ok. I am still interested.

I: Ok. Thank you. The interview is being recorded but the recording will not be shared with a third party without your permission and you have the option to suspend your involvement at any time. If you accept these conditions we can start.

P: I accept. Let's start.

I: Thank you. Let's start with the first questions? What do you think of integration of the computers in your school?

P: I think it is highly insufficient. There is only one computer in classrooms and the internet connection is very weak. The computers are old in terms of technology so sometimes we face with some difficulties. Especially restrictions and Internet filter of MNE prevent us from visiting some useful web sites.

I: I see. You express that the computers integration in your school is weak. Right?

P: Yes, unfortunately.

I: Ok. How important do you think adopting technology in language teaching is?

P: I think it very important because our aim is to teach learners how to use language. And the technology shows the real language to children. For example movies, songs, lyrics, games with the help of them children can use language. Otherwise language becomes an abstract concept and stays inside the walls of the classroom.

I: Alright. Do you want to add anything?

P: We have to use technology in language teaching. Firstly technology provides visuals. And it is also beneficial to those who have different learning styles in terms of multiple intelligences theory. I believe it is also beneficial to input and output.

I: What will be the use of computer in classrooms?

P: Computers should be constantly in students' use just like they can be used freely by the teachers in lessons. There are strict restrictions for students in our system. We generally restrict students too much by saying that computers may be broken down or something else. But I think student should use computers whenever they want.

I: And who do you think benefit more?

P: Of course student. Our aim in using technology is to teach students better.

I: Do you think that we can achieve this?

P: Personally I cannot say that I can achieve.

I: What skills and ability of technology do you think essential in order to manage to use in teaching?

P: I think teachers should have some basic skills and ability such as reading writing or how to use Word as well as downloading or using some programs. They should use the Internet efficiently for example what are there in websites or what can be used what can be more beneficial. I think teachers should be quite familiar with computers.

I: Well Do you say that teachers should at least be technology literate?

P: Yes this is exactly what I am trying to say. Teachers should use technology very well in order to use it in classroom practice.

I: Do you think that are there any differences between teaching with technology and without technology?

P: Firstly, If there is computer, the time can be used more efficiently. As I mentioned before more permanent learning can be provided because we can design a learning situation that appeals to all learning styles. Moreover we can ensure students use what they learned in the lesson with the help of technology.

I: What does ‘computer-assisted language learning’ mean to you?

P: I guess it is the integration of language learning and technology.

I: Can you give me any examples?

P: DYNED application that MNE use may be an example.

I: In your working environment, is there any support for teachers wishing to use technology in teaching? What kind of support, if any?

P: School management want us to use the computers and projection devices we have in our school. When we face some difficulties they do their best to overcome. But there may be some situations that they cannot do anything. We don’t get much technical support outside the school.

I: You said that the computers you have are old and insufficient. Did you inform your school management about the situation?

P: Of course. The school management are aware of the situation. They try to help as much as they can. But unfortunately they have limited things to do.

I: I see. What is the reason for it? Is it lack of budget?

P: Lack of budget and lack of technical support I can say. They are among the problems.

I: Ok. Have you ever used computers or any technology in your language teaching? In what ways?

P: I have been using technology since I started teaching. I sometimes bring my laptop. I use it especially for songs, games and to provide visuals. I consistently use the computers in schools. For DYNED, visuals and at least listening activities I use the computers in the school. Mostly I use pedagogically appropriate songs for listening. I am harvesting the benefits of these. Students have become learning phrases and words thanks to these songs, games and dances. I try to use them combining with TPR and I think it benefits.

I: I have faced with technical problems I mentioned before. There may be power cut or the computers may freeze. Apart from these I haven't face any difficulties. Frankly, it doesn't require too much skill as I use technology in basic level.

P: Thanks for your participation.

I: You are welcome.

CURRICULUM VITAE

The author was born in Ipsala, Edirne in 1990. He completed her primary and secondary education in Ipsala. He graduated from Keşan Yusuf Çapraz High School in 2008. In the same year, he attended the English Language Department at Mustafa Kemal University. He was transferred to Trakya University in 2009. He graduated from ELT Department at Trakya University in 2012. He started MA program of ELT at Atatürk University in 2013. He worked as an English language teacher in Artvin from 2012 to 2015. He has been working as a research assistant in ELT department at Fırat University since 2015.