# THE PERCEPTIONS AND CHALLENGES OF YOUNG LEARNERS' EFL TEACHERS TOWARDS INTERACTIVE WHITEBOARD USE IN EFL CLASSES

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## THE PERCEPTIONS AND CHALLENGES OF YOUNG LEARNERS' EFL TEACHERS TOWARDS INTERACTIVE WHITEBOARD USE IN EFL CLASSES

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#### **ABSTRACT**

### THE PERCEPTIONS AND CHALLENGES OF YOUNG LEARNERS' EFL TEACHERS TOWARDS INTERACTIVE WHITEBOARD USE IN EFL CLASSES

#### Güdücü, Tuğba

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This thesis aimed to investigate young learners' EFL teachers' perceptions towards IWB use in classroom setting as well as the challenges they faced during their teaching process. In addition, it investigated how young learners' EFL teachers benefited from IWBs in classroom setting. The present study implemented mixed-method research design using both qualitative and quantitative data. The data were collected by means of questionnaire, open-ended questions, observation and interviews. One observation was held in a pre- school with age 6 students, one observation was held in a primary school with first graders through the observation checklist. Eighty EFL teachers of young learners who worked in private schools in Turkey answered the questionnaire. The results presented young learners' EFL teachers had positive perceptions towards IWB use in their lessons. It was found that when IWB was used aimfully and conspiratorially, IWB were beneficial tool for young learners of EFL classes in terms of interactivity, motivation, learning styles, variety of materials, authenticity. Besides, the triangulation of the data revealed teachers came across technical challenges so, teacher training before IWB use in EFL classes was a necessity in order to overcome the technical problems faced during the teaching process and to create an effective language learning

environment. The participant teachers stated that IWB helped them to meet the needs of all the students in a class who had different learning styles. In brief, even though teachers felt that they were able to use IWB in young learners' classes; they believed training beforehand was a necessity.

Keywords: Interactive Whiteboards, EFL, Young Learners, Perceptions

#### ERKEN YAŞTA İNGİLİZCE ÖĞRENENLERİN ÖĞRETMENLERİNİN İNGİLİZCE SINIFLARINDA AKILLI TAHTA KULLANIMINA KARŞI ALGILARI VE KARŞILAŞILAN ZORLUKLAR

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Bu tez, erken yaşta İngilizce öğrenenlerin öğretmenlerinin sınıf ortamında AT kullanımına karşı algılarını ve bu öğretme sürecinde karşılaştıkları zorlukları araştırmayı amaçlamıştır. Ayrıca, bu yabancı dil İngilizce öğretmenlerinin sınıf ortamında AT'den nasıl yararlandığı araştırılmıştır. Mevcut çalışmada nitel veya nicel verileri kullanarak karma yöntemli araştırma tasarısı uygulanmıştır. Veriler anket, açık uçlu sorular, gözlem ve görüşmeler vasıtasıyla toplanmıştır. Bir gözlem 6 yaş öğrencileri ile bir okul öncesi sınıfında, bir gözlem birinci sınıf öğrencileri ile bir ilköğretim okulunda gözlem kontrol listesi aracılığıyla gerçekleştirildi. Türkiye'de bulunan özel okullarda erken öğrenenlerle çalışan 80 İngilizce öğretmeni anketi cevaplamıştır. Bulgular, çocukların İngilizce öğretmenlerinin derslerinde AT kullanımına karşı olumlu algıya sahip olduklarını göstermiştir. AT amaçlı ve planlı kullanıldığı zaman, İngilizce sınıflarındaki çocuklara interaktiflik, isteklendirme, öğrenme stilleri, materyal çeşitliliği, otantiklik, vs. açısından yararlı olduğu görülmüştür. Veri üçgenleme öğretmenlerin teknik zorluklarla karşılaştığını göstermiştir. Bu yüzden öğretme sürecinde karşılaşılan zorlukların

üstesinden gelmek adına sınıflarda AT kullanımından önce öğretmenlerin eğitilmesi gerekli görülmüştür. Özetle, öğretmenler kendilerini AT kullanımında yeterli hissetmelerine rağmen kullanım öncesinde alınacak eğitimin gerekliliğine inanırlar. Katılımcı öğretmenler AT'nin sınıfta farklı öğrenme stillerine sahip olan tüm öğrencilerin ihtiyaçları ile buluşmada yararlı olduğu belirttiler. Özetle, genç öğrenenlerin sınıfında AT kullanabilmelerine rağmen, öğretmenler önceden bir eğitim almanın gerekliliğine inanırlar.

Anahtar Kelimeler: Akıllı Tahta, İngilizce Yabancı Dili, Erken Öğrenenler, Algılar

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#### LIST OF ABBREVIATIONS

BECTA British Educational Communications and Technology Agency

CALL Computer Assisted Language Learning

CD Compact Disc

CD-ROM Compact Disc-Read Only Memory

DVD Digital Versatile Disc

EAP English for Academic Purposes

EFL English as a Foreign Language

ELT English Language Teaching

ESL English as a Second Language

ICT Information and Communications Technology

IWB Interactive Whiteboard

MNE Ministry of National Education

PLATO Programmed Logic for Automated Teaching Operations

TESOL Teachers of English to Speakers of Other Language

#### Chapter 1

#### Introduction

This chapter includes an introduction to the current study. It starts with a theoretical framework of the study, followed by the statement of the problem, purpose of the study, the research questions of the present study, significance of the study, and finally the operational definitions for the basic and frequently used terms in the study.

#### 1.1 Theoretical Framework

During the recent years, computers have become supplementary instructional tools in EFL classrooms. The educators who want to make learners to participate in learning through technology have a great desire of interactive applications (Bell, 2002). As the first revolutionary tool in classrooms to be an essential teaching material, the blackboards had an impact two decades ago in 1801 however the interactive whiteboards (IWBs) have increasingly become a primary teaching tool, which is also becoming an indispensable part of teaching in innovatory schools (Betch & Lee, 2009). After the radio, television, CD player, computer, projector were designed and somehow utilized in second language teaching, IWBs were designed and they have become the first digital instructional technology produced basically in support of instructors (Betcher & Lee, 2009). Including 'touch-sensitive display unit' on the white, wide screen like a board as an 'input' equipment, IWBs are connected to a computer besides that they show the properties of a computer which can be used through this large touch-sensitive screen (Lee & Winzenried, 2009; Murcia, 2014).

In order to use them effectively and interactively in teaching, instructors can take advantage of variable functions and features of IWBs; they can use the features such as photos, pictures, tables, diagrams, music, videos, games, through the operations like highlight, color, copy-paste, sliding, hiding, revealing, layering on the IWB screen.. (Betcher & Lee, 2009; Murcia, 2014). With the help of those various features, students who have different learning styles can benefit from IWBs; tactile students can utilize the

function of 'touch-sensitive screen', visual learners are able to follow the displays on the screen, audio learners may listen to the discussions and communicate with other students, kinesthetic learners can follow the instructions according to the function that the instructor has chosen (Bell, 2002).

The IWBs were indicated as one of the most beneficial technology tool for both young and adult learners in their classroom environment. By using IWBs, students are able to participate in the activities actively by controlling the computer through the touch-sensitive screen, which increases student motivation and learning (Gursul & Tozmaz, 2010). Jonassen indicated (as cited in Eke, 2014) that having the chance to decide what to practice in their studies increases learners' autonomy by planning and methodizing their own learning. Additionally learners have taking notes easiness in that they don't waste time by taking notes during the learning process since they have a chance to print them after the class (Brown, 2003; Amiri & Sharifi, 2014) By this means, it enables effective interaction between instructor, student and the learning source itself (Murcia, 2014; Türel & Demirli; 2010). It has been also specified that teachers can receive information easier than the traditional board by the way of having an access to a great variety of sources, sharing and using the resources in a collaborative way (Brown, 2003). IWBs are also beneficial for young learners as they supply a wide range of materials such as songs, videos, pictures, which can be integrated in different tasks. They want to draw or write on the screen whenever it is possible by utilizing its colorfulness feature, which helps them engage in the activities in classrooms (Bell, 2002).

There are undeniable benefits of IWBs for teachers as well. Teachers leave the old-fashioned traditional teacher-centered methods in order to improve the standard of the teaching and to create more student-centered learning environment (Atasoy, Ozdemir & Somyurek, 2009; Basmatzi, 2014). In an attempt to achieve this aim, instructors take advantages of integrating a wide range of materials in to the learning environment via internet connection and share those materials with their colleagues (Brown, 2003). It was referred by Schmid and Schimmack (as cited in Oz, 2014) that teachers satisfy the

needs of learners who have various learning styles (kinesthetic, visual, and aural) when they use the different functions by integrating in the classroom activities effectively. Additionally, as a time saving benefit for teachers that all the materials or activities referred during the class can be printed before and after the lesson to hand out (Somyurek, Atasoy & Ozdemir, 2009; Glover & Miller, 2001).

After mentioning the benefits of using IWBs both for teachers and students in EFL classes, we should also refer some possible investigated challenges and drawbacks that teachers face during the teaching and learning process. Firstly, it is irrefutable that IWBs are much more expensive than the traditional boards, which results in that it would be more expensive to fix the board when there is a technical problem about it (Brown, 2003). Accordingly as another drawback of IWBs is that the users are faced with some technical problems just as students engage in the lesson, which may result in loss of attention and motivation (Aytaç, 2013; Hall & Higgings, 2005; Türel, 2012). Aytaç (2013) indicated that some teachers grumble about the preparation of material for IWB integrated classes since in their opinions they need more time to prepare a wide range of suitable materials for each level of students. In addition to these, as a result of preparing unsuitable and inelaborate activities, instructors create teacher centered learning environment in English language classes by presenting the materials only (Aytac, 2013, Faki & Khamis, 2014). Lastly, one of the most significant drawbacks of using IWBs in English language classes is having the lack of training (Faki & Khamis, 2014). Even though Elaziz (2008) indicated in his research that the teachers who are enthusiastic about using IWB technology and capable of monitoring ICT tools don't need additional training to use this technology in English language classes. In an attempt to solve possible technical problems and meet students' both pedagogical and educational needs effectively, teachers' training on utilizing IWBs is necessary (Basmatzi, 2014; Gashan & Alshumaimeri, 2015; Khamiz & Faki, 2014; Somyurek, Atasoy & Ozdemir, 2009).

Another significant point is the perceptions of second language teachers' towards the use of IWBs in classrooms. To explore their attitudes and perceptions, a few studies have been conducted, (Eke, 2014; Elaziz, 2008; Sarac, 2015; Gashan & Alshumaimeri,

2015; Hall & Higgings, 2005; Lee & Boyle, 2004; Öz, 2014). Apart from teachers' positive perceptions, significant conclusions for IWB use have been found to turn to account in educational settings.

#### 1.2 Statement of the Problem

Technology has been utilized in education and foreign language classroom for about 30 years around the world (Elaziz, 2008). Although computers and ICT tools have being utilized with the intent to improve students' knowledge and diversify the activities, interactive whiteboard is a recent tool in education.

Teachers' perceptions and attitudes of using IWBs in foreign language classrooms have been investigated by some researchers (Lee & Boyle, 2004; Elaziz, 2008; Türel & Johnson, 2012; Aytekin, Abdulaziz, Barakat & Abdelrahman, 2012; Toor, 2013; Eke, 2014; Öz, 2014; Saraç, 2015; Balta & Duran, 2015; Gashan & Alshumaimeri, 2015; Kalanzadeh, 2015). The literature lacks of the studies that investigate the perceptions of especially young learners' English teachers and the challenges they face before – while - after teaching English as a foreign language to young learners.

In Turkey, utilization of interactive whiteboards has become popular in young learners classes as well. Especially in the private schools, IWBs have been installed in almost every classroom to provide teachers and students a high quality of education with technology. For the state schools, the government installed approximately 85.000 IWBs in the first step, 347,367 IWBs in the second step of FATIH project in January 2014 (Akçay, Arslan & Güven, 2015). It is a good opportunity for teachers and students to have a beneficial supplementary technological tool in the classroom to create more effective learning environment but having an idea about young learners' teachers' perceptions of using IWBs in foreign language classroom is also significant to find out the challenges they face, their knowledge about the related technology, and whether they experience the expected benefits.

#### 1.3 Purpose of the Study

The aim of the present study is to investigate the perceptions of young learners' EFL teachers about using IWBs in English foreign language classroom, but also finding out the challenges they face in the classroom pre-while-after teaching English through IWBs to young learners. The study reveals what they think about their competency for using IWBs in young learners' English foreign language classes as well. In addition to these, the current study gives information about how young learners' EFL teachers use IWBs in classes and what kind of facilities they take advantage of.

#### 1.4 Research Questions

The following research questions were investigated by the current study;

- 1. What are the perceptions of young learners' EFL teachers' towards the use of IWBs in classroom setting?
- 2. How do the young learners' EFL teachers use IWBs in their classes?
- 3. What are the challenges they face pre-during-after the use of IWBs in EFL classes with young learners?
- 4. What are the teachers' perceptions of their competency for using IWB in EFL classes with young learners?

#### 1.5 Significance of the Study

Implementing IWBs in young learners classrooms has become widespread both in private and state schools. Additionally, IWBs are available for very young preschool learners in private schools. This study investigates the perceptions of the young learners' EFL teachers towards IWB use in Turkey. Although investing a new technology in classrooms is thought to be effective and beneficial, educators should have a clear idea about 'how this technology may contribute to their particular teaching and learning process, and need to be aware of opinions of the people who are using this technology currently' (Elaziz, 2008, p.7) before taking a step. On this basis, educators in Turkey will benefit from this study in terms of the perceptions of young learners' EFL teachers

preparatory to invest on this recent IWB technology in their classrooms. The will have a clear idea about the challenges that young learners' EFL teachers come across while utilizing IWB in their classes. They can benefit from this study before taking a step to invest this technology in their EFL classrooms. Moreover, it will affect their decisions on what to do before, during and after the implementation process of IWBs in educational fields.

#### Chapter 2

#### **Literature Review**

#### 2.1 Introduction

Foreign language learning is a field undergoing an unprecedented change. English has been used as a global language which helps people with different languages to communicate for several purposes such as conducting a business activity, travelling to foreign countries, having an access to information via the Internet, searching on a topic from different references, and so on. Therefore, English language learning has become an increasingly significant issue. Researchers believe that technology which has potential to influence new approaches plays an important and effective role in language learning (Saltourides, 2009; Thronton & Houser, 2005). In the last fifty year period computers have been used for learning language (Lee, 2000). These days Computer Assisted Language Learning (CALL) has significant effect in foreign language education. It facilitates the language learning process (McNeil, 2000). One of the latest technological tools for education is computer which has been the most used resource in language teaching (Lee, 2008). Development of technology can be the reason why CALL is important in foreign/second language education.

After various developments and innovations in technology have been made use of in educational field, as a recent technological tool, Interactive Whiteboards (IWB) have been used by English foreign language teachers in language classrooms for about 30 years around the world (Brezinova, 2009). Many companies have been established to design and provide software for foreign language education. English books have been published including IWB related activities, and governments installed IWBs in schools to enhance education (Dudakova, 2013).

The following Literature Review chapter presents Computer Assisted Language Learning and Interactive Whiteboard including their drawbacks and benefits in English foreign language classrooms. Moreover, it also focuses on young learners of English foreign language in terms of their characteristics and IWB usage.

#### 2.2 Computer assisted language learning (CALL)

Computer Assisted Language Learning which is form of computer based learning is an approach for learning language. The focus is on both learning and teaching. CALL offers variety of educational materials. Foreign language teachers use computers to supply appropriate materials and resources for ESL and EFL learners (Kasapoğlu-Akyol, 2010). CALL is known as the study of computer based practice to improve English language. So, according to many researchers "What is Computer Assisted Language Learning?"

- According to a Davies (2010) definition of CALL is an approach and a way to teach and learn language by using computers including a sustained interactive component as a supporting source to the presentation, reinforcement and assessment of materials to be learned.
- Levy (1999) defined the CALL as the study of application of the computer to teach and learn foreign language.
- Breadth of knowledge in a sentence a meaning of CALL suits its changing nature
  is any procedure in which learners use computers to study and improves their
  language through computers. (Beatty, 2003).
- CALL has encompassed the issues of materials design, innovations, technological
  and pedagogical hypotheses and program of instruction. Resources used for
  CALL can incorporate those which are purpose-made for language learning and
  those which adjust existing computer-based materials, video and other necessary
  materials (Beatty, 2003).
- As agreed upon by the all interested participants in a meeting at the 1983 TESOL
  convention CALL was the expression. In general this term is used to allude to the
  field of technology and teaching and learning second language in spite of the
  way that modifications for the term are proposed consistently (Chapelle, 2001).

Each researcher defines CALL in a different way above. Their definitions differ from each other but they refer to the same meaning. Warschauer (1996) and Warschauer and Healey (1998) categorize the development of CALL into three main phases; behavioristic CALL, communicative CALL and integrative CALL. In Moras's article published in 2001, he also divided CALL development in three phases.

2.2.1 Behavioristic CALL. Behavioristic CALL was the oldest and first phases of CALL which was practiced in the 1960s and 1970s (Taylor, 1980 & Warschauer, 1996). Behavioristic CALL depended on the behaviorist learning model, so it has the characteristics of behaviorist learning. "Drills and practice" (Drill and kill) which depend on the model of computer as tutor are entailed by the phase of behavioristic CALL (Taylor, 1980, Rahimpour, 2011 & Warschauer, 1996). The computer was that of a tutor and the materials delivered were repetitive language drills such as vocabulary, translation tests and grammar which are included in the most sophisticated system named as PLATO (Programmed Logic for Automated Teaching Operations) system, as described by Taylor (1980). Ahmad, K., Corbett, G., Rogers, M. and Sussex, R. (1985) also mentioned that behavioristic CALL was mainly used for extensive drills, explicit grammar instruction and translation tests.

2.2.2 Communicative CALL. Communicative CALL which was against behaviorist approach to language learning started in the 1970s and 1980s. This phase was mainly based on communication and related with language instruction of 'Direct Method' that focus on L2 exclusively (Skinner, Ludwig & Judin, 2015). Communicative CALL was included in some programs to benefit from different types of communication activities. Taylor's (1980) introduction of CALL approach in terms of the use for activities in support of communication involves computer as stimulus (such as conversation, written tasks critical thinking) and computer as tool (such as spelling and grammar check programs). Learners can create their own learning environment with this phase; therefore, it gives students and opportunity to become autonomous learners. They

get feedback from the computer with reliable check programs. They also have a chance to communicate with their pen-pals through computer and meet other English language students from different countries with different cultures (Rahimpour, 2011; Warschauer & Healey, 1998).

2.2.3 Integrative CALL. The third and last phase of Computer Assisted Language Learning is integrative CALL which is the current one. It started in the 1990s and is still been used. Warschauer (1996) stated that Integrative CALL includes two important technological developments which are Multimedia and the Internet. Multimedia which provide variety of media formats (sound, video, graphics, texts, pictures and animations) exemplified by DVD or CD-ROM and the Internet that is a computer network that provides necessary facilities including communication and variety of information (Warschauer, 1996). Learners are expected to learn a language with four important skills. Warshauer and Healey (1998) stated that Integrative CALL seeks both to integrate various skills of language learning (listening, speaking, reading and writing) and to integrate recent technology fully into language teaching and learning in order to meet learners' needs. Diversity tools are provided for learners with the help of integrative CALL which also allows interaction between individual language learners, so they have an opportunity to use variety of technological tools (Rahimpour, 2011; Skinner, Ludwig & Judin, 2015).

Table 1

The Three Stages of CALL

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

(Based on Kern & Warschauer, 2005; Warschauer, 1996; Warschauer, 2000a)

#### 2.2.4 Advantages and Limitations of CALL in Teaching English as a Foreign

Language. According to some researchers there are many reasons to use CALL for learning English. Depending on the concerns of English language teaching, it is believed that CALL is capable of overcoming some of the limitations, supporting the success of English language learning and teaching in a different ways (Chapelle. 1997; 2003; Salaberry. 1999; Warschauer. 1996; Warschauer & Healey. 1998; Warschauer and Kern, 2005; Yang ,2008). As it can be concluded from these researchers' findings computer has significant effects and advantages on learning and teaching English for both learners and teachers.

# 2.2.4.1 Advantages of CALL in Teaching English as Foreign Language. Warschaure and Kern (2005) demonstrated that by exposing learners to authentic language tasks, learners are forced to control their learning time and effort to communicate. CALL supplies learners an opportunity to be an autonomous learner who has individualized learning experience (Skinner, Ludwig & Judin, 2015). CALL can be reached any time with a low price. Therefore, learners can use computer whenever they need and want both inside and outside of the classroom. It may help to improve their self-confidence. Wherefore CALL includes more student-centered resources and authentic learning resources and tasks in learning process (Skinner et. al., 2015).

Second; CALL is one of the most motivating learning methods in the classroom (Ahmad, K. et al. 1985, Skinner, Ludwig & Judin, 2015). CALL programmers can supply students many ways to learn English through computer games, animated graphics, and problem solving techniques which can make drills more attractive. (Ravichadran, 2000). This means it gives an opportunity to practice English language with funny games and enjoyable activities. Variety of interest is a one of the biggest problems in English learning and teaching since each student has different learning styles and learning needs. Teacher can meet the learning needs by supplying different levels and interests of resources on the computer. All students may do the activities without getting bored. Some students are quick learners and some are slow learners. Computers may offer learning activities for both types of students. So quick learners can do more activities to improve their English and slow learners can catch the quick learners by doing extra activities and using different materials. Skinner and Austin (1999) claimed that students' interests, motivation and confidence will be promoted with computer use in language learning, whereas Warschauer (2004) assert one benefit to increase motivation is when students work on the computer, they tend to spend more time on tasks.

A third advantage of CALL is to improve interaction among learners, teachers and computers. Three types of interactions which are interpersonal communication (interaction between people), learner-computer interaction (between person and

computer) and intrapersonal interaction (within the persons' mind) are involved in CALL pedagogy (Chapelle, 2003). The quality of interaction among participants is generally acknowledged in order to become an indicator of accomplished online experience, because interaction has been noted to contribute to both achievement and students' satisfaction (Roblyer & Wiencke, 2004). Teachers can create classroom groups on the internet to share ideas and activities related to the classes whenever they desire. Learners can follow the lesson outside of the classroom, share the materials from the Internet, and discuss about a subject that they learned. Even shy students pay more attention to online lesson, because creating effective collaborative learner group on the computer or in an online environment encourage learner to communicate (Brindley, Walti and Blaschke, 2009).

Another advantage for both teachers and students is that the computer offers the materials and resources which can be kept for a long time and shared by other teachers and students. Computers make possible to share used materials again and again, so teachers should keep the resources and whenever necessary teacher can find them on the computer (Bruce, 1990; Ibrahim, 2010).

2.2.4.2 Limitations of CALL. Although there are many advantages of CALL technology, it includes some limitations and disadvantages. The general known limitation is that there are many teachers who have limited knowledge about technology. Computer will only be useful while instructors are conversant with computer technology (Lai & Kritsonis, 2006). If the learners don't know the features of computer, students don't manage to do assignments and improve their English. Both teachers and learners need training to use computer in an appropriate and educational way (Aytaç, 2013; Cogill, 2002; Somyürek, Atasoy & Özdemir, 2009; Türel and Johnson, 2012; Öz, 2014).

The second disadvantage is the language aspects. CALL provides many useful and necessary resources that help to improve reading, listening and writing. However speaking activities are limited (Skinner et. al. 2015).

Another disadvantage of CALL is financial problems. Computer technology including ICT tools is necessitating more money to purchase them (Chapelle, 2001). Computer technology isn't provided by the government and school for each student. Low socio-economic students don't have any chance to use computer at home. This situation is not fair for all learners in learning second and foreign languages, and therefore it can be stated as a disadvantage. Hartoyo (2006) assumed that a lot of funds have to be provided to help more students by purchasing equipment, ICT tools and maintenance.

Additionally, long hours of computer use has great negative effect on learners and teachers health, learners spend and stay for long time in front of the screen to complete tasks or activities (Iacob, 2009). It is sometimes a problem for both learners and teachers, it may cause eye health problem.

The last disadvantage of CALL is that there are limited programs for different skills. According to findings of Indrawati's research in 2009 functions for improving learners' speaking skill is limited. Learner need to improve not only fluency of speaking but also pronunciation and syntax. Warschauer (2004) stated that a program should ideally be able to understand a user's spoken input and evaluate it not just for correctness but also for 'appropriateness' (as cited in Lai, 2006).

To sum up computer assisted language learning activities, resources and materials should be available to maximize the advantages that are mentioned above. Materials selection and evaluation process is significant to provide effective English language learning experiences. They should serve aims and based on learners' interests and needs.

**2.2.5 CALL for EFL Young Learners.** There have been limited numbers of studies on computer assisted language learning for young learners in EFL classes. Learning via computers provides various learning environments because they have various features that motivate learners and not only improve their learner autonomy but also enhance self-esteem. (Al-Awidi & Ismail, 2012; Iacob, 2009; Lacabex & del Puerto, 2014; Warschauer, 1996; Warschauer, & Healey, 1998; Murray, 2011).

Computers which are known as the most used technological tools are making learning more productive and effective in foreign language classes (Al-Awidi & Ismail, 2012). Variety is important for learners especially for young learners (Cameron, 2003) because of the fact that the attention span of young learners whose ages are between 5 and 7 is around 5 and 10 minutes and for ages 8-10, it is around 10-15 minutes, teachers should have variety of activities for one lesson (Scott, Ytreberg, 1990). Klimova (2014) stated that "CALL should always be applied purposefully and effectively to meet the teaching objectives of an English lesson and students' needs" (p. 48). Al-Avidi and Ismail (2014) indicated that "Attention was given to the integration of computer technology in teaching English as a second language (p. 29)" because of the opportunities of CALL programs. Many attractive programs which should provide activities stirring young learners' curiosity and interests in performing the task correctly (Iacob, 2009) can be included in a computer.

CALL motivates young learners, provides opportunities for an active interaction, has benefits to enhance children's' reading skills and supports their reading. Moreover, children can listen to stories read aloud, recognize letter and sound relationships, and identify letters (Al-Awidi & Ismail, 2012). With the computer assisted language learning "the child is exposed to a dynamic combination of sounds, music, images, combined in an attractive story that makes the child excited to participate to what is happening on the computer screen" (Iacob, 2009, p. 144). Computer-based learning has also positive effects on phonetic training of L2 sound perceptual awareness for young learners. (Lacabex & del Puerto, 2014). Children assume computer as their wonderland (Smith, 2016).

#### 2.3 What is Interactive Whiteboard?

There are several definitions for the interactive whiteboards. A clear definition was made by The British Educational Communications and Technology Agency (BECTA) (as cited in Elaziz, 2008) as the following;

"An interactive whiteboard is a large, touch-sensitive board which is connected to a digital projector and a computer as the projector displays the image from the computer screen on the board. The computer can then be controlled by touching the board, either directly or with a special pen as it can be seen in Figure 1" (BECTA, 2003b, p. 1).

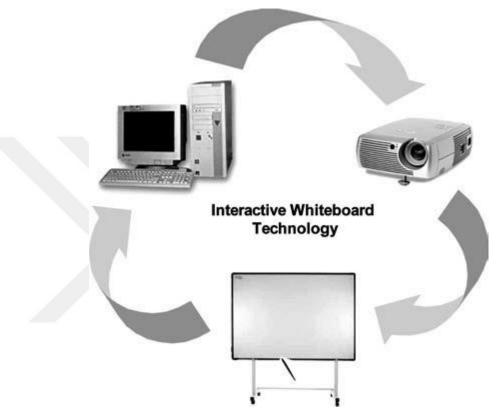


Figure 1. How IWB technology works.

As it can be seen in Figure 1, ''the computer images are displayed on the board by the digital projector. The images then can be seen and all applications on the computer can be controlled via touching the board, either with your finger, or with an electronic pen/stylus'' (Schmid, 2006, p.48). With the help of this technology, it can be added that the notes taken on the IWBs can be saved, edited and printed (Saleem, 2012). The notes can be written with the help of special pens designed for the interactive whiteboards or users can take advantage of their fingers as a mouse (Somyurek, et al., 2008). This system includes a sensor on the surface and a radio wave system which sense the position of the pen or finger on the surface and this position calculated by the computer itself (Digregorio & Lojeski, 2010). In an attempt to keep up with the new internet age,

interactive whiteboards with the specialties of wide screens, Internet access, audio-video demonstrations, recording classes for future usage, new age assessment types, and so on are placed in the contemporary classrooms (Manzo, 2010). Interactive whiteboards give users an opportunity to drag and drop items on the touch-screen in different directions, hide and reveal items, highlight the important sections, animate an item by changing its features, store and reuse the resources with materials and be given feedback from teachers clearly with the help of the mentioned features (Glover, Miller, Avaris, & Door, 2007).

2.3.1 IWBs in English Language Education. Over the past years, developed and under developed countries have made a great investment in Interactive whiteboard technology use at schools to facilitate both learning and teaching and to improve the quality of education they have in their countries and keep up with the times (Hall & Higgings, 2005). Additionally, most of the schools enable separate English labs or English classrooms in which there is one computer for each student and one interactive whiteboard for the whole classroom (Gerard, Widener & Greene 1999). In Turkey, besides most of the private schools, in which learners get education in consideration of some payment, are equipped with interactive whiteboards in each class; the Ministry of National Education (MNE) conducted a project procuring IWBs and tablets for every school all around the country for the purpose of encouraging students to learn foreign language and encouraging the language teachers to apply different methods in order to teach language in various ways (Sarac, 2015).

IWBs enable teachers to reach variety of resources with great speed through the opportunity of having the Internet connection and presenting the materials on the large screen to whole class. English language teachers can take advantage of these features of IWBs; they manage to design activities to increase the interaction and communication with students, present contemporary language knowledge elements with cultural settings and arrange their teaching processes (Gerard, Widener & Greene, 1999). Having the capability of using technology in English language classroom environment increases

teachers' occupational improvement and contributes positive interaction with learners (Saleem, 2012). When we think the difficulty of becoming relaxed and confident in any conversation with language learners in the classroom environment, they provide possibilities to interact with students instead of dealing with the technical issues. It is a great opportunity for both language learners and teachers since they focus on the same issue at the same time (Gerard, Widener & Greene 1999). As an example of presenting materials facility, Hur and Suh (2012) indicated that teachers may show a visual representation or a video to the class when language learners have difficulty in comprehending or get confused about the definition of a vocabulary item in their learning process. Having an opportunity to access encyclopedias and dictionary software programs makes it easier for instructors to satisfy learners' needs during the class (Elaziz, 2008). It is stated that with the help of various software programs, teachers may design language teaching activities such as digital stories, games, etc. in order to advance students' vocabulary knowledge and language structure (Hur & Suh, 2012). In an effort to save a lesson for future use, instructors have a great opportunity to record the lesson during the process or after note taking (Hal & Higgings, 2005), which conduces to organize their lessons and teaching (Gerard, Widener & Greene, 1999).

Blake (2008) indicated that in order to speed up the level of the second language that learners need to acquire, they have to be exposed to L2 in the countries where the target language is spoken by means of studying, working, or travelling. However this process may not be suitable for all learners in terms of materiality. So, Blake (2008) concluded that technology is a marvelous chance for language learners to deal with the language in authentic way when it is benefited intelligently in the curriculum. Instructors give opportunities to the learners' present course works and enhance their linguistic skill in the target language by navigating the IWB with the help of its touchscreen feature of IWB (Gerard, Widener & Greene, 1999). In addition to this, getting access to various, up to date, and authentic materials related to the theme through IWBs makes learners to participate in class activities enthusiastically by arousing their interests to the lesson (Oz, 2014). Eventhough students write on the IWB touch sensitive screen, they are motivated

and get positive perceptions towards the IWB, which assists them to have excitement about learning English (Gerard, Widener & Greene 1999). Language teachers play a big role in achieving target language aims by managing the IWBs effectively in English language classes through the instrument of software programs, ICT tools, programs or IWB features itself.

**2.3.2 Benefits of Interactive Whiteboards.** In the literature, numerous benefits and positive impacts of using IWBs in language classes are asserted with the positive perceptions of language learners and teachers. The benefits of IWB are classified into benefits for students and benefits for teachers below.

2.3.2.1 Benefits for Students. The specialties of IWBs in classroom environment present a wide range of advantages for students. This technology offers second language learners a great range of materials to take advantage, such as media, visual items, audio, animation, games, etc. so students' comprehension, participation and interaction increase by means of this variety (Betcher & Lee, 2009; Tanner & Jones, 2007). Because of the reason that IWBs include enjoyable and attracted materials, learners feel motivated and participate in the class activities enthusiastically (Elaziz, 2008; Shmid, Higgings, Wall & Miller, 2005; Schmid, 2006). In other words, interacting with the board assists students to raise motivation and concentration (Aytac, 2013; Biro 2011; Digredoriro & Lojeski, 2010). When those materials and methods are managed effectively, visualization and contextualization through the instrument of IWB facilitate students' learning in English language classes (Sad & Ozhan, 2012). When the input is sent with the right stimulus, language learners absorb the information uncomplicatedly (Brown, 2003).

Authenticity is ensured in IWB language classes in all skills; speaking, reading, listening, and writing (Lee, 2000). Integrated activities with authentic materials also can help learners to comprehend the subject matter better by far (Ishtaiwa & Shana, 2011). The interaction between student-student, teacher-student, and in groups is one of the other great benefits of IWBs in English language classes. It is incontrovertible fact that

IWBs enhance interactivity with technology itself without teacher interruption, which reinforces autonomy in learning English (Tanner & Jones, 2007). Additionally, the note-taking and writing needs decrease in virtue of IWB gives opportunity to save a lesson for future use, which end up time saving advantage (Biro, 2011). When it comes to writing or note taking on the board, compared to the traditional board with chalk and the dust that it creates, IWB is much more hygienic for students with its digital pen and penwiper (Sad & Ozhan, 2012). They also stated that utilizing IWBs in classroom is practical in terms of its pen, eraser, silence, and hygiene.

2.3.2.2 Benefits for Teachers. IWB is beneficial supplemental digital tool to teach English in classroom environment (Elaziz, 2008; Gashan & Alshumaumeri, 2015; Oz, 2014). In this new age, owing to the fact that technology attracts students' attention, teachers have to know how to use it in their teaching (Manzo, 2010). There are numerous studies focusing on the benefits of integrating IWB into English Language Teaching (ELT) in terms of teachers. One of these benefits for language teachers are classroom interaction. Toscu's (2013) study results clarified that IWB based lessons has a positive impact on teacher-whole class interaction. This technology not only assists teachers to interact with whole class; it also helps teachers to create small group works, personalized teaching environment, and student-student interaction when it is used in a reasonable way even with 5 year old preschool learners (Aytac, 2013; Betcher & Lee, 2009). Since pictures, animations, songs, and so on attract young learners' attention; teachers can take advantage of integrating them into vocabulary games, stories, grammar explanations, listening, speaking, reading and writing lessons (Dudakova, 2013).

The most significant issue that conducive to this result is having the chance of reaching a wide range of teaching resources and satisfying diversified pedagogical needs of learners at the same time since whole class focus on these materials at the same time (Elaziz, 2008). Additionally, it provides easiness to combine all different media types such as video, audio, animation, graphic, texts, etc. compared to old, traditional ways that teachers literally cut-paste to combine the materials (Betcher & Lee, 2009). It is a

good opportunity to boost their interest and curiosity in relation to the theme (Wong, Goh & Osman, 2013). Having a chance to highlight, color, draw, zoom, or adding another item on their instructions pre-during-after the lesson enables teachers to improve their presentation (Turel & Johnson, 2012). In addition to this, teachers take advantage of using authentic materials that they can access easily and present through IWB (Khamis & Faki, 2014). These facilities are accepted as a great time-saving issue among teachers while teaching (Oz, 2014). IWBs support teachers to organize their teaching by giving chances to create folders, saving and organizing materials according to their needs (Gerard, Widener & Green, 1999). As Murcia (2010) specified, teachers do not have to search and prepare needed materials during the class; they have chance to prepare and store their resources on the computer memory, and then select whichever they need at any moment.

Practicing IWBs does not only motivate learners; it also motivates language teachers since they feel more comfortable and have the control of their classes through enjoyable activities as an efficient teacher in English language classes (Oz, 2014; Turel & Johnson, 2012).

2.3.3 Drawbacks and Challenges of Interactive Whiteboards. Although IWBs are beneficial tools in language learning classes, there are some non-negligible drawbacks and challenges stated in the literature. The most significant drawback is concluded in Basmatzi's (2014) research. In order to create an effective and collaborative learning environment in language classes, teachers should have training before they start to use IWB. Another issue about this factor is that teachers waste their time in preparing material to use in classes if they are not competent enough to use IWB (Basmatzi, 2014; Maher, Urane & Lee, 2012). Some schools reject to provide teacher training on IWB for the reason that it is found high-priced (Balta & Duran, 2015). For some administrators having this technology in classrooms is much more expensive than the projector or white boards (Brown, 2003). Teachers are expected to have technical training on IWBs before they implement this technology into their teaching (Turel &

Johnson, 2012). According to the Khamis and Faki (2014), teacher training should not only be about the technical issues; teachers also need pedagogical training in order to meet all students' needs while applying IWB into English language classes.

Interactivity is known as one of the biggest advantage of IWB. As Aytac (2013) indicated in his study that IWB supports teacher-student interaction. However, it reduces the amount of student-student interaction because teacher cannot use IWBs as collaborative tools. Unfortunately, some teachers use IWBs only as presentation tool in practice even they have craft knowledge with the awareness of pedagogical framework of IWB (Khamis & Faki, 2014; Turel, 2012). In this frame, the biggest disadvantage is that lessons turn into teacher-centered by reducing learner-autonomy (Tanner & Jones, 2007). It is essential to indicate that IWBs are not the magical tools embedded in the classrooms; it is the teacher who will create materials and activities that support effective learning and teaching in English language classes (Aytac, 2013).

Technical problems such as freezing, sunlight blocking seeing clearly, software issues, electrical problems, calibration, sensitivity, connection, etc. happening during the lesson distract students' attention and make learning less effective, which causes a waste of time (Hall & Higgings, 2005, Aytac, 2013). A small technical factor indicated by Gerard, Widener and Greene (1999) is that teachers may have problems about the pens and eraser when they pass over to place it back since they are electronically connected to their places; the system can senses that the pen has been distracted. These kinds of problems decrease the motivation of students (Elaziz, 2008; Turel, 2012).

**2.3.4 Teachers' Perceptions of IWB Use in EFL Classes.** Regarding the results of the studies related with interactive whiteboards, teachers have both positive and negative perceptions towards these devices in English language classes. When the literature about the teachers' perceptions toward using Interactive Whiteboards in English language classroom was reviewed, a limited number of studies have been explored, especially with young learners. However, it has been increasing from day to

day with the technology development in a recent day. This part presents the studies and researches related to the teachers perceptions towards the use of Interactive Whiteboard.

Elaziz (2008) carried out a study in order to explore the teachers' students' and administrators' perceptions towards the use of Interactive Whiteboard (IWB) in both teaching and learning language. He also investigated the negative and positive factors affecting their perceptions toward the use of IWB. 458 students and 82 teachers and 3 administrators participated in the study from different institutions. Questionnaire, interview, open ended questions and observation were implemented, so the data were collected both quantitatively and qualitatively. Quantitative data was analyzed by using Statistical Package for Social Sciences (SPSS). The findings revealed that both teachers and students thought that IWB is beneficial while learning and teaching, it's useful for students to take an advantage of using audio and visual materials. IWB increased their concentration, motivated and helped students to keep their attention longer. The findings also revealed that teachers encountered some challenges so they need to be trained for being competent.

Yaratan and Kural (2010) conducted a study about the teachers' perceptions of Instructional Technology in English classroom. This study was accomplished at Eastern Mediterranean University to 253 middle school English language teachers but only 80 of them took part in the survey. Although teachers encountered some restrictions such as lack of time and lack of the technological means, they had positive perception about the technology use in ELT classroom.

Saraç (2015) investigated the TPACK and Turkish EFL teachers' perceptions towards the use of IWB and also the relationship between TPACK and teachers' perceptions toward IWB use. Twenty four Anatolian High school participated in the study with 106 in service EFL teachers. The attitude questionnaire and ELT TPACK questionnaire were conducted in order to gather information with the combination of content knowledge, pedagogy and technology. The data was analyzed with the descriptive statistics (SPSS). According to the participants' reports they had positive perceptions towards the use of interactive whiteboard. And also there was meaningful

positive relationship between the TPACK levels and perceptions of the teachers. The results of the study reported that teachers need training in order to support for teachers, because teachers need to be competent and feel confident in using IWB.

A study was directed by Gashan and Alshumaimeri (2015) to investigate the perceptions of Saudi female teachers towards the use of IWBs while teaching English as a foreign language (EFL). They also investigated the possible obstacles that they encountered during the use of this technological tool. According to them the use of technological tools motivates, encourage and provide better learning environment to the students. 43 teachers who used the IWB actively participated to the study. A quantitative research method including questionnaire was employed to find out teachers' perceptions toward using IWB. Statistical Package for the Social Sciences (SPSS) was applied to analyze data. The findings of this study demonstrated that they had positive perceptions towards using IWB in the EFL classroom. They also stated that IWB helped to enhance the teaching and learning process. IWB provide various techniques, activities and strategies into practice. During the study teachers faced some technical problems so the researchers recommended that training need to be provided for teachers to overcome problems encountered.

Toor (2013) investigated the students', teachers' and school managements' attitudes and perceptions towards the use of IWB in the EFL classroom and also his study focused on valuable insights during the actual use of IWBs. Different from the other studies this research gathered information qualitatively and quantitatively with observation, open ended questions and questionnaire. The data was collected from 21 students, 31 teachers and 6 administrators. Open ended questions were analyzed with the comments of researcher and questionnaire was analyzed with the Survey Monkey. The findings revealed that IWB technology increased learners' awareness and because of their awareness administrators were motivated and they purchased IWBs for every classroom. Teachers, students and administrators have positive perceptions. He stated in his study "Teachers should know how to demonstrate and integrate ICT and IWB technology in classroom settings" (p. 23), because it includes both technical and

pedagogical aspects of IWB use. According to him teachers needed to be aware of technological changes on daily basis.

Öz (2014) conducted a study related to perceptions and attitudes of teachers and students towards IWB in the EFL classroom. The aim of the study was to explore perceptions and attitudes of interactive whiteboards in the EFL classroom and it aimed to find out differences of perceptions including variables such as gender, English proficiency level, hours of weekly IWB use and years of teaching experience. Open ended questions were conducted qualitatively and two self-report questionnaires were given to 164 students. And also t-test and one way ANOVA was employed. The items in the questionnaire were analyzed through Statistical Package for Social Science (SPSS). The findings of the study stated that there was difference between the teachers who had more years of teaching experience and who had less years of experience. The more years of experienced teachers had favorable perceptions toward the use of IWB. During the IWB lesson learners got involved in using IWB actively so their perceptions might change favorably. The most important findings stated that teachers should acquire the competencies in pre-service and in-service training programs so they needed to be trained for the use of IWB, because there are some challenges.

In Shams & Ketabi's (2015) article named as Iranian Teachers' Perceptions towards the Use of Interactive Whiteboards in English Language Teaching Classrooms. The purpose of this study was to interpret teachers' beliefs about interactive whiteboard use and the frequency usage of IWB Iranian schools. Data was gathered from 174 EFL teachers ranging from grades six to eleven with 22 Likert scale questionnaire quantitatively and qualitatively. According to findings of the research teachers improved IWB competencies with the frequently use of IWB. Descriptive analysis was carried out to find the main goal. High percentage of teachers had positive perceptions towards the effects of IWB use during the EFL lesson on the basis of descriptive analysis. Furthermore they added that teachers needed to be trained and do more practice in order to transform their pedagogical knowledge into student centered and social interactive learning.

The positive perceptions of students affect the teachers' perceptions towards the use of interactive whiteboard assertively because teachers are encouraged to use these devices in order to engage students with IWB which makes teaching more comfortable and effective (Balta & Duran, 2015; Gashan & Alshumaimeri, 2015). Basmatzi (2014) stated that in general:

"iWBs are educational tools which have an immense potential to open up new vistas, promote meaningful interaction, help teachers break away from sterile and ineffective teacher-centred practices, endorse a feeling of student empowerment and achievement as global citizens and generally improve the quality of teaching and learning" (p. 339).

IWB makes the lesson enjoyable and interesting for both teachers and students who have positive perceptions towards the use of IWB, but while using IWBs, some problematic aspects which are not taken as negative issue may be encountered. Teachers can overcome these problems with the frequency of IWB use, IWB competency, sources of IWB skills, technical and material-based support, rectifying technical problems quickly and provide training for teachers (Basmatzi, 2014; Gerard, Widener, & Greene, 1999; Hall & Higgins, 2005; Kalanzadeh, 2015; Türel & Johnson, 2012;). Teachers at many primary schools in İstanbul frequently use IWB and they think they have the experience how to use IWBs properly so "teachers' perceptions toward prominent issues of IWBs were generally at a moderate level" (Türel, 2012. p.423). Although some of the teachers in the study think that they don't have enough time to let their students use IWB, they are aware of the strength and practicality of using IWB which facilitate learners' motivation and teachers' instructions (Türel & Johnson, 2012).

**2.3.5 Teacher Training in IWB Technology.** While using IWB in the English language classroom, teachers may encounter some challenges because of technical problems and lack of knowledge about the use of interactive whiteboards (Al-Faki & Khamis, 2014; Manny-Ikan, Dagan, Tikochinski & Zorman, 2011).

Teachers should be aware of not only technical competencies and skills but also pedagogical implications in order to motivate students and provide effective lesson to the learners (Türel & Johnson, 2012; Manny- Ikan et. al., 2011). Akcay, Arslan and Güven (2015) indicated that "Technical and pedagogical training along with support from the school administration is necessary in order to achieve an ideal integration of IWBs in the classroom" (p.29). Technical competencies differ from the pedagogical competencies. Technical competencies are correlated with the capability of using interactive whiteboard functions with various characteristics such as pen, touch screen, eraser, underlying and highlighter tools, manipulating images and texts, saving notes, recording interactions, using power point and visual media, printing and using the web resources (Higgins, Giglioli and O'sullivan, 2011; Türel & Johnson, 2012). Pedagogical competencies include;

- "how to use the IWB and design the lessons, switching from a traditional approach
   (the teacher-centred lesson) towards more interactive and collaborative
   approaches;
- how the IWB can meet different learning needs and cognitive styles and how to foster a student-centred approach in designing lessons" (Higgins et. al. 2011, p. 14).

Teachers have a crucial role to integrate ICT into language classroom. They should use IWB in a right way and choose the appropriate materials for the learners, so they should be trained on how to use IWB effectively (Aytaç, 2013; Somyürek, Atasoy & Özdemir, 2009). Teachers are needed to be trained to be acquainted with the strategies and techniques for using interactive whiteboards (Cogill, 2002). In the study of Türel and Johnson (2012) teachers don't have enough knowledge how to use IWB so they are trained according to their lack of knowledge. In the study of Öz (2014) conducted a study in order to investigate teachers' and students' perceptions of interactive whiteboard in English language classroom. In his study he gathered data from 58 EFL teachers and 164 EFL students. He used both qualitative (open ended questions) and quantitative (questionnaire which has 26 five-point-Likert-scale items for students) data

from the participants. The result of the study showed that teachers and students had favorable perceptions to the use of IWB and high percentage of teachers showed positive perceptions to the interactive whiteboard training sessions. Teachers are not comfortable when they are not competent enough to use IWB in the classroom (Öz, 2014; Somyürek, Atasoy & Özdemir, 2009), so high percentage of teacher participants (%81) needs IWB training (Öz, 2014).

## 2.4 Young Learners

In the globalization world, the number of young learners learning English at very young ages has become widespread (Cameron, 2003). Parents support their children to have English classes out of the school. It was analyzed from numerous studies that the younger children are exposed the second language in the environment, the more they will have native-like pronunciation (Harley & Wang, 1997) The difference between L1 and L2 acquisition is identified with the help of Critical Period. Lennenberg, Chomsky and Marx (1967) claimed that the onset age of the language is 2 and the end of the critical period is puberty or between the ages 12 and 15. Harley and Wang (1997) indicated after reviewing the literature that the onset age of the second language is accepted as 6 or 7 till adulthood. According to Johnson and Newport (1989) the capacity of learning and acquiring languages at early ages is higher and unless they practice language by this capacity, it will extinguish with maturation.

When young learners acquire a foreign language, they still learn their mother tongue. Besides, children are still growing up cognitively, emotionally, linguistically and physically (Moon, 2005). Thus, teachers should be aware of the characteristics of young learners owing to the fact that teaching young learners is much more different than teaching adults. For the characteristics of young learners see the Table 2.

Table 2

Characteristics of Young Learners, adapted from Shin (2006) and Ersöz (2007)

Very Young Learners	Young Learners	Older/Late Young		
(3-6 years old)	(7-9 years old)	Learners		
		(10-12 years old)		
Short attention span but	Short attention span, great	Longer attention span		
excited easily	amount of materials needed	They are aware of the		
Not aware of the	Be aware of the difference	difference between reality an		
difference between	between reality an	imaginary items		
reality and imaginary	imaginary items	Developed motor skills		
items clearly	Limited motor skills (left-	More vocabulary knowledge		
Repetition is a must	right)	Having capacity of working		
Limited motor skills	Short-term memory;	as partners and in groups		
(handling scissors and	revision is a must	Responsible of their learning		
pen)	Difficulty in working in	Are able to take		
Kinesthetic and energetic	groups	responsibilities for routines		
Stories, fictions,	Developing vocabulary	and activities		
imagination, art, drawing	knowledge	Active and curious		
& painting are liked	Stories, fictions,			
Not able to organize	imagination, drawing &			
their learning	painting are liked			
Active and curious	Active and curious			

Teaching English as a foreign language in preschool or primary schools to young learners is a serious issue since children have different inner association and formulation (Cameron, 2003). One of the significant factors to teach English to young learners is caretaker speech with simple codes, exaggerated tone of voice, gestures-mimes,

simplified language, I+1, short sentences in order to give more comprehensible input by using various techniques (Krashen, 1981). Additionally, Krashen (1981) indicated with his input hypothesis that during the caretakers speak, they do not simplify their speech consciously. Caretakers observe that the child has already acquired some structures (I, I – 1) and they add new structures (I + 1) during their communication including the background knowledge of the child, which teachers should apply in foreign language teaching in classroom environment for young learners.

Managing young learners' class would be tough for some teachers. Classroom management is defined as organizing and controlling the class by taking advantage of teachers' skills, methods, techniques and strategies in order to create a successful learning environment (Schneiderova, 2013). In the literature some advice are highlighted for teachers to manage the young learners' foreign language classes. Firstly, teachers need to know foreign language pedagogy to generate different strategies according to the young learners' pedagogy and they should have an understanding of how young learners learn. Besides, they need to have an ability to interact with young learners by attracting their attention (Cameron, 2003; Moon, 2005). Having a wide range of materials helps teachers constitute an effective learning environment by reaching multiple intelligences. Moving from one activity to another attracts students' attention in connection with their short attention span. Teachers can benefit from games in their classes since young learners learn through games and since they are attractive, motivating and challenging and it makes learning effective that students practice the target language in their natural environment (Ersoz, 2000). In an effort to give comprehensible input to young learners, teachers can utilize gestures, mimes, visuals, puppets, toys, and creative materials they can find, which make learning permanent since young learners have a short attention span (Shin, 2006). In addition to this, adding routines in teaching lead up to permanent learning since it includes lots of repetition and revision (Lefever, 2007). Using stories also help teachers to create more motivating and relaxed environment to contextualize the foreign language in a comprehensible way (Yıldırım & Torun, 2014). As pre-post activities for the stories, teachers can give opportunity to students to create visuals and realias due to the fact that creating art and crafts related to the topic cause learners to individualize the target items which enhance learning (Shin, 2006). The theme or topic based teaching is effective and efficient in terms of young learners' capacity of connecting items that they learn (Shin, 2006; Bandu 2015).

According to Krashen (1982) foreign language acquirers are distracted by the emotional factor, which affects their affective filter. If students' affective filter is high, they are not motivated, they don't have self-confidence and they have anxiety during learning. He concluded that acquisition takes plays when the students' affective filter is low. Lin (2008) conducted a study in an attempt to test Krashen's affective filter hypothesis by using songs, movies, games in teaching as motivational factors and they concluded that these strategies helped learners have low affective filter with effective learning environment. IWB is a good supplement to provide motivational learning environment. Additionally, Shin (2006) indicated that while they are learning their first language, children are highly motivated and learn the mother tongue in the authentic environment. On the contrary they can be less motivated while they are learning a foreign language in the classroom environment, which is not authentic. It is significant to provide young learners a natural, authentic environment where they are able to be exposed to the target language. Using IWB can assist teachers to create an authentic environment with a wide range of materials.

### 2.5 Conclusion

This chapter reviewed the literature related to CALL, IWBs and young learners. Computers have been used in EFL classes for fifty years and it has an outstanding role in language teaching and learning (Lee, 2000). The effectiveness of using computers in foreign language teaching is associated with using IWBs in EFL classes. In Turkey, most private schools and government schools provides IWBs in classrooms and laboratories for all the students at school to benefit from. In the literature, it can be concluded that teachers have positive perceptions towards IWB use in EFL classes but it can be seen that it is not clearly known what young learners' EFL teachers' perceptions

towards IWB use in classroom. The utilized methodology in the current study will be shown in the next chapter involving research design and research context with participants, settings, procedures of data collection instruments and data analysis.

## Chapter 3

## Methodology

#### 3.1 Overview

The present study specifically aims to find young learners' EFL teachers' perceptions towards IWB use in classroom setting. This study seeks answers for the following research questions:

- 1. What are the perceptions of young learners' EFL teachers' towards the use of IWBs in classroom setting?
- 2. How do the young learners' EFL teachers use IWBs in their classes?
- 3. What are the challenges they face pre-during-after the use of IWBs in EFL classes with young learners?
- 4. What are the teachers' perceptions of their competency for using IWB in EFL classes with young learners?

In this chapter research design, research context in which settings, participants of the study and procedures are included, will be identified. Consequently, data collection and data analysis procedures will be described respectively.

## 3.2 Research Design

The present study has been designed as a case study which includes mixed method research technique in collecting data and data analysis. Case study is defined as detailed research of a person, cohort, or foundation in which the variables and the relationship among the variables affecting the present attitude of the subject of the study are ascertained (Fraenkel, Wallen & Hyun, 2006). Case study is a good opportunity for the researchers to have an in depth information about the data in a particular context (Zainal, 2007). Yin (1984) indicated that there are three particular types of case studies; exploratory, descriptive and explanatory case studies (as cited in Zainal, 2007). Exploratory case studies investigate situations in which data contribute as a concern for

the researcher. Secondly, in descriptive case studies the originated developments within the data in question are introduced. Lastly, explanatory case studies explore the data in detail both superficially and deeply in an attempt to investigate the situation in the data.

Mixed method research or mixed model design is identified as a kind of research technique in which researchers or investigators combine both quantitative and qualitative research methods, techniques or approaches in a particular study (Johnson & Onwuegbuzie, 2004; Creswell, Clark, Gutman & Hanson, 2003). Quantitative research methods "are a focus on deduction, confirmation, theory/hypothesis testing, explanation, prediction, standardized data collection, and statistical analysis" (Johnson & Onwuegbuzie, 2004, p.18). Qualitative research design was described by Harwell (2011) as "inductive, in the sense that a researcher may construct theories or hypotheses, explanations, and conceptualizations from details provided by a participant" (p.149). This study also focused on triangulation because the data were collected with the instrument of observation, questionnaire and interview. Triangulation where more than two or multiple data sources are used in order to answer research questions and reinforce the validity of a finding is a mixed approach and method (Olsen, 2004; Yeasmin & Rahman 2012).

## 3.3 Research Context

This section contains detailed information about the research context with study setting and EFL teachers as participants of the present study. It also includes data collection procedures with the data collection instruments.

**3.3.1 Setting.** Because of the reason that it was difficult to reach a large number of young learners' EFL teachers who regularly use IWBs while teaching at one school, equal distribution of the type of the educational institute was not possible. The current study was conducted in different institutions in which IWBs are available in each class by sending the questionnaire to 80 teachers in Turkey. See Appendix A for the questionnaire. The teachers who answered the questionnaires did not work in public

school; they were working in private schools. In order to send the questionnaire, the school administrators were asked for help to distribute the <u>survey</u> online to reach sufficient number of EFL teachers who worked with young leaners. The observations were held in two classes in Istanbul; first graders' teacher was observed in a private primary school and age 6 preschool learners' teacher was observed in a private preschool. The mentioned classrooms had IWBs in the classroom which were used by both teachers and students for different lessons.

**3.3.2 Participants.** Eighty EFL young leaners' teachers from different institutions participated in the present study. In order to reach high number of teachers, the data were collected from teachers who worked in different institutions online. The participants of this study were young learners' EFL teachers who had both pedagogical formation and graduated from university. All of the participant teachers were working in primary schools, language schools with young learners or preschool with age 6 students. As stated in the table 3, 93,8 % of the participants were female whereas 6,3 % of the participants were male. The reason of the percentages of the participants' gender was explained in a study investigated by Turkish Statistical Institute (2016); in Turkey, while 94% of the preschool teachers were female, 6 % of them were male.

Table 3

Gender of the Participants

		Frequency	Percent	Valid Percent
Valid	Male	5	6,3	6,3
	Female	75	93,8	93,8
	Total	80	100,0	100,0

As it is seen in the Table 4, majority (73 %) of the participants of the present study was EFL teachers who work in preschools or 16 of the participants were EFL teachers who work in primary schools. Only 5 of them work in language school with young learners.

Table 4

Type of School

		Frequency	Percent	Valid Percent
Valid	Preschool	59	73,8	73,8
	Primary	16	20,0	20,0
	Language School with Young Learners	5	6,3	6,3
	Total	80	100,0	100,0

On the basis of teachers' teaching hours by using IWB is shown in the Table 5. Most of the participants (32,5 %) use IWB 11 or more hours a week in EFL classes with young learners. In the sequel, 25 of the participants remarked that they used IWB in their classes 3 - 5 hours a week. Twenty three of the participants used IWB in their classes for 6 - 10 hours a week. Lastly, 6 teachers indicated that they used IWB in EFL classes for 1 - 2 hours a week.

Table 5

Teaching Hours of the Participants

		Frequency	Percent	Valid Percent
Valid	1-2 hours a week	6	7,5	7,5
	3-5 hours a week	25	31,3	31,3
	6-10 hours a week	23	28,8	28,8
	11 or more hours a week	26	32,5	32,5
	Total	80	100,0	100,0

The participant teachers had various degrees of experience as it can be seen in Table 6 below. Most of them (70%) had 1-5 years of experience when 25% of them had 6-10 years of experience. There were 4 most long-serving teachers who had 11-15 years of experience. Additionally, 100% of the participants indicated that they use IWB for integrated skills mostly in young learners' EFL classes.

Table 6

Experience of the Participants

		Frequency	Percent	Valid Percent
Valid	1-5	56	70,0	70,0
	6-10	20	25,0	25,0
	11-15	4	5,0	5,0
	Total	80	100,0	100,0

3.3.3 The Researcher's Role. The researcher has been teaching to young and very young learners as an EFL teacher for 5 years. She has background information about the use of IWB in young and very young learners EFL classes, which assisted her to improve research implementation. During the study, the researcher was provided detailed information about IWB implementation in young learners EFL classes by the head of the English departments in some private schools. In addition to this, the researcher had a chance to get some EFL related software used in young learners' classes as pre or post activities. In the course of observations, although the researcher observed the classes with the help of observation checklist, she had a chance to observe the teachers' and students' IWB use in educatory aspects since she had 5 years of experience working with young learners and drawing on IWBs in her teaching.

### 3.4 Procedures

This section of the study presents detailed information of data collection procedures and instruments which are questionnaire, observation, and interview. The following part includes clarifications of data analysis procedures of the current study.

**3.4.1 Data Collection Procedures.** In the data collection procedure, in order to find out young learners' EFL teachers' perceptions of IWB use, three data instruments were applied. 1) A questionnaire adapted from Elaziz (2008) aiming to ascertain young learners' EFL teachers' perception of IWB use in language classes in terms of teaching. See Appendix A. 2) Two classroom observations were carried out to have a clear idea about how young learners' EFL teachers take advantage of IWB in classroom environment and to find out whether they come across challenges while using IWB based on an observation checklist adapted from Elaziz (2008). For the observation checklist, see Appendix C. 3) Interviews. For the interview questions, see Appendix B. The following part presents elaborate information in consideration of the mentioned data collection methods applied in this study. Data collection instruments aims to seek an answer for each research questions.

3.4.1.1 Questionnaire. The questionnaire was prepared by Elaziz (2008) and Cronbach Alpha of this questionnaire is 0.78, which shows that it is reliable. It has three sections; the first section aims to get general information about the participants such as their age, gender, experience, and the schools they worked with six multiple choice questions. The second section includes twenty three questions with five point Likert-scale items aiming to have information about teachers' general perceptions towards IWB. The last section includes two open ended questions with the purpose of getting additional information and suggestions from EFL teachers about the problems they face pre-during-after they use IWB in their classes. See Appendix A. Since the questionnaire was not used with young learners in Elaziz's (2008) study, some minor adaptions were applied to adapt it to young learners' EFL teachers.

In an attempt to reach sufficient number of participants, a head of the English department of a private preschool was negotiated to distribute the questionnaire to the sufficient number of young learners' EFL teachers. She sent the questionnaire as a word document through e-mail to 92 EFL teachers who work with preschool young learners in different campuses in different cities but the same institution in Turkey and 39 of them answered it voluntarily. The other 39 participants got the questionnaire through Google forms online with the help of social media and 2 participants answered the questionnaire on paper.

3.4.1.2 Observation. After the questionnaires were answered, two English classes were observed in order to understand how young learners' EFL teachers use IWBs in their lessons, what kind of facilities they take advantage of and what kind of challenges they face during the lesson. The teacher observations were recorded via a camera. After the observations, the recordings were analyzed with regard to the observation checklist to describe how young learners' EFL teachers practice upon the related technology. The observation checklist was adapted from Elaziz's (2008) research on perceptions of both students and teachers towards the use of IWBs in EFL classrooms. For the observation checklist, see Appendix C.

3.4.1.3 Semi-Structured Interview. With the purpose of obtaining information about teachers' perspectives of their competences and more detailed information about the challenges they faced, randomly chosen 3 volunteered young learners' EFL teachers were interviewed face-to-face. The interview questions can be seen in Appendix B. The interviews took approximately 5 minutes. Three of the teachers were in-service teachers; two of them were working in pre-school, one of them was working in primary school. The primary aim of the interviews were eliciting more detailed information about the problems of the young learners' EFL teachers faced pre-during-after their lessons and what the teachers' perceptions of their competency for using IWB in EFL classes with young learners. The interview questions were designed based on these purposes. The

researcher recorded the interviews with the permission of the participants and typed the dialogue through the recordings afterwards. Because semi-structured interviews include open ended questions, which causes unplanned discussions at the same time and make it hard to take notes during the interview (Cohen & Crabtree, 2006).

**3.4.2 Data Analysis.** The present study aims to find answers to four research questions. In order to be familiar with the collected data, they were divided into categories according to research questions. In an attempt to find an answer to the first research question, the questionnaire data except for the open-ended questions was analyzed quantitatively. The twenty three items were analyzed through Statistical Package for Social Science 17.0 (SPSS statistics 17.0) excluding two open-ended questions. The researcher calculated the frequencies, descriptive statistics and percentages for each item.

For the second research question which aims to find how young learners' English teachers use IWB in their lessons, the observation recording from young learners' classes was analyzed qualitatively using content analysis. The first observation applied in the preschool was first recorded via a camera then watched and analyzed through the instrument of observation checklist. The second observation in primary school was applied with the help of observation checklist; it was not recorded. It was observed that what kinds of IWB features that teachers benefited from in their EFL classes, what challenges they faced and were not be able to use an IWB feature.

Open-ended questions in the instrument aimed to find an answer for the third question related to the challenges that young learners' English teachers face during their teaching process. The questions were in the last part of the questionnaire. The 80 teachers got the open-ended questions and voluntarily 33 of them answered one, two or three of the open-ended questions in detail. In order to define the common concepts and obtain a meaningful finding from the data, the researcher wrote all the answers on a table and categorized them according to the common challenges or suggestions that participants indicated.

Lastly, for the forth research question which asks about teachers' perceptions about their ability to use IWB, the data was analyzed through the interviews qualitatively. The interviews with volunteered EFL teachers were audio-recorded in order not to miss any significant point mentioned during the interaction. The researcher got permission to record the interviews. The recordings were transcribed and analyzed by the help content analysis.

As it can be concluded, each data instrument serves each research question in this study. However, during the data analysis it was noticed that each data instrument served not just one research question due to the fact that the research questions were addressed to answer linked cases. For instance, while the open-ended questions aimed to find the challenges on IWB use, the qualitatively analyzed observations and interviews gave some answers to find out what kinds of challenges the young learners' EFL teachers experience before-during-after this process, too. Another example was experienced for the last research question. Although the interviews were aimed to find teachers' perceptions about their use of IWB, a posed question in the quantitative analyzed questionnaire mostly contributed the study in terms of the last research question.

Table 7
Research Questions, Data Collection and Data Analysis

Research questions	Data collection methods	Data collected	Data analysis technique
What are the perceptions of young learners' EFL teachers' towards the use of IWBs in classroom setting? How do the young learners' EFL teachers use IWBs in their classes?	Questionnaire (adapted by Elaziz, 2008)	in-service ELT teachers' self- perceived attitudes towards IWB use in young learners' classes  In-service primary and preschool EFL teachers' classes' video – observation checklist	Descriptive Statistics (SPSS)  Content Analysis
What are the challenges they face pre-during-after the use of IWBs in EFL classes with young learners?		in-service EFL teachers' reflections and opinions about their experiences in young learners' classes during IWB use	Content analysis
What are the teachers' perceptions of their competency for using IWB in EFL classes with young learners?	Semi-Structured Interview	in-service EFL teachers' reflections and opinions about their competency for IWB use	Content analysis

#### 3.5 Trustworthiness

In an attempt to create a trustworthy qualitative research paper, Guba (1981) mentions four criteria; credibility, transferability, dependability, conformability (as cited in Shenton, 2004).

In credibility of internal validity, the investigators assure that the study has measured what virtually is aimed to measure or test (Shenton, 2004). In order to achieve credibility, the investigator benefited from her background qualifications and experience especially during the observations. Additionally, in order to establish credibility in the present study, triangulation was involved by conducting classroom observations and individual interview with the young learners' EFL teachers. The researcher's awareness stage was high during the observation, which contributed to the study in various aspects. The examination of the previous research related to the current study was examined to establish credibility.

For the transferability criterion, it is important to include broader group of participants in the study so as to ensure that the research can be applied to different situations. Additionally, it is significant to inform the readers about the context of the study in detail for a purpose to give them a chance to evaluate how transferrable the findings are for their situations (Krefting, 1991). The transferability criterion was achieved in the present study by including elaborate information about the context of the fieldwork in the methodology chapter.

Dependability criterion was achieved by including detailed research design and its implementation, operational detail of data collection. Additionally, the thesis advisor examined the accuracy of the findings, interpretations and conclusions. As for the last criterion Guba indicated that conformability viewed neutrality as researchers' objectivity (as cited in Shenton, 2004). In an attempt to establish comfortability and reduce researcher's biases, triangulation was applied in this study.

#### 3.6 Limitations

Even though the present study investigated young learners' EFL teachers' perceptions of IWB use in terms of teaching, the following limitations should be paid attention before commenting on the results.

As a first limitation, the interviews were held only with three volunteered teachers, which limit the external validity of the results of the study. The present study reached 80 participants who worked in different institution; 39 participants were from the same institution, the rest of them were at different schools around Turkey. Even if all of the participants indicated that they used IWB in their EFL classes, their curriculums and syllabus differ from each other in terms of their objectives. So, the duration of IWB use in their classes probably differ from each other and it may lead to difference in their perspectives on IWB. Additionally, since it was a case study, it focused on small group of participants. Although there were participants around Turkey from different schools, the results should not be generalized. With the help of qualitative data and thick description, readers are expected to decide how applicable or transferrable the results to their own settings. A further study with larger number of participants would give indepth analysis of the related issue.

The signified limitation applies to the observation process as well. Two observations were conducted in a preschool age 6 class and first grade in which students were 7 years old. According to some researchers (Shin, 2006; Ersöz, 2007) young learners ages are categorized as 3-6 very young learners, 7-9 young learners and 10-12 late young learners. The researcher was not able to carry on observations for all teachers teaching each age group. In the light of this information, the observation results about the use of IWB may not be generalized since there are various ways of utilizing the related technology with different age groups.

Additionally, teachers were aware that they were being recorded, which might have affected the nature of their teaching.

### 3.7 Delimitations

The current study focused on young learners' teachers' perception towards IWB use in EFL classes and the challenges they face during their teaching process along with the investigation of how they benefit from IWBs in lesson. The students' perceptions were not investigated because of their ages and maturity. In addition to this, the number of the interviewees for the study was limited because of the voluntariness. The same circumstance was experienced for the classroom observation step. Because of the tough procedures of getting permission from the administrations at schools and the limited time, only two classes were able to be observed.

#### 3.8 Conclusion

In brief, this chapter reviewed the methodology of the current study including research design, research context, procedures, and limitations. Participants, setting, and the researcher's role were explained under the title of research context. Procedures part included data collection and data analysis procedures. It was adverted in the data collection procedure that questionnaire, observation, semi-structures interview instruments were used for this research. Lastly, the limitations of the present study were referred in short course.

# Chapter 4

### **Results**

This chapter addresses the results from the data analysis of questionnaire, observation and semi-structured interview. The questionnaire including twenty three items was analyzed through Statistical Package for Social Science 17.0 (SPSS statistics 17.0) in detail.

## 4.1 Perceptions of the teachers towards IWBs

To answer the first research question 'What are the perceptions of young learners' EFL teachers' towards the use of IWBs in classroom setting?' the questionnaire data were analyzed. The questionnaire was taken by eighty teachers who were working in primary schools; language schools with young learners and preschool with age 6 students. The quantitative results derived from the analysis of questionnaire items are presented in five sections below. First section includes the teachers' perceptions towards the use of IWB in young learners' classes. The items between 10 and 16 (Table 9) in the second section are related with the General attitudes towards the use of IWB in young learners' classes. Third section indicates the motivational issues and the fourth one is about teacher training. The fifth also the last part of the questionnaire is with regard to the competencies of EFL teachers of young learners. The items are ordered from high to low mean scores in the tables.

Table 8

Teachers' Perceptions in Terms of Using IWB

		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree	Mean	Std. Deviation
Q3	%	0,00	0,00	00,0	18,8	81,3	4,8125	,39277
	f	0	0	0	15	65		
Q4	%	0,00	0,00	7,5	23,8	68,8	4,6125	,62630
	f	0	0	6	19	55		
Q7	%	0,00	1,3	2,5	36,3	60,0	4,5500	,61418
	f	0	1	2	39	48		
<b>Q</b> 9	%	0,00	3,8	6,3	43,8	46,3	4,3250	,75933
	f	0	3	5	35	37		
Q5	%	0,00	00,0	10,0	48,8	41,3	4,3125	,64815
	f	0	0	8	39	33		
Q6	%	0,00	15,0	8,8	41,3	35,0	3,9625	1,02431
	f	0	12	7	33	28		
Q1	%	3,8	12,5	13,8	35,0	35,0	3,8500	1,14847
	f	3	10	11	28	28		
Q8	%	1,3	15,0	22,5	33,8	27,5	3,7125	1,06965
	f	1	12	18	27	22		
Q2	%	20,0	42,5	16,3	15,0	6,3	2,4500	1,15726
	f	16	34	13	12	5		

Teachers' attitudes towards the use of IWB in young learner classes were revealed in the first part of the questionnaire. As indicated in Table 8, the mean score of the item 1-9 ranked between 4,81 and 2,45 out of five. The third question results indicated that 100 % of teachers believe that using IWBs makes it easier to reach different sources and display them to the whole class immediately with the highest mean score which is 4,81.

The majority of the teachers (more than 90%) either strongly agreed or agreed with: a) IWBs are beneficial for saving and printing the materials generated during the lesson (item 4); b) IWBs can be a good supplement to support teaching (Item 7); c) Using IWBs makes it easier for a teacher to review, re-explain, and summarize the subject (Item 9); d) I can give explanations more effectively with the use of IWBs (Item 5)

More than sixty percent of teachers either agreed (41,3%) or strongly agreed (35,0%) that with the help of using the IWB they can easily control the whole class (Item 6); 61,3% of teachers also believed that using IWBs makes them a more efficient teacher (Item 8); In addition, teachers also either agreed (35.0%) or strongly agreed (35.0%) that using the IWB resources reduces the time spent writing on the board (Item 1). The means score of these items were 3,96, 3,71 and 3,85, correspondingly.

On the second question that has the lowest mean score in this part, 16.3 percentage of teachers neither agree nor disagree and in total 62.5% of teachers either disagreed (42.5%) or strongly disagreed (20.0) with "When using IWBs in the classroom, I spend more time for the preparation of the lesson".

Table 9

Teachers' General Perceptions towards the Use of IWB

		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree	Mean	Std. Deviation
Q10	%	0,00	1,3	1,3	30,0	67,5	4,6375	,57904
	f	0	1	1	24	54		
Q12	%	0,00	0,00	5,0	43,8	51,3	4,4625	,59414
	f	0	0	4	35	41		
Q15	%	31,3	37,5	10,0	18,8	2,5	2,2375	1,16101
	f	25	30	8	15	2		
Q11	%	58,8	18,8	1,3	10,0	11,3	1,9625	1,42708
	f	47	15	1	8	9		

Q16	%	51,3	38,8	3,8	3,8	2,5	1,6750	,91090
	f	41	31	3	3	2		
Q14	%	65,0	21,3	3,8	5,0	5,0	1,6375	1,10515
	f	52	17	3	4	4		
Q13	%	66,3	26,3	2,5	3,8	1,3	1,4750	,82638
	f	53	21	2	3	1		

The second part of questionnaire including seven items is related to the general tendencies of teachers towards the use of IWBs in English young learners' classes. Table 9 including items 10-16 illustrated that there is significant difference between the mean scores of item 10 and 13, out of 5 it is varied between 4,64 and 1,47.

The results showed that in item 10 approximately 97,5 % teachers indicated that they like using IWB technology in their lesson and 95,1% of teachers either strongly agreed (67.5%) or agreed (30.0) with having positive perceptions towards the use of IWBs in language instruction, only 5.0% of them (out of 80) had no idea about this statement, in conjunction with item 12. 92,6 % of teachers strongly disagreed (66.3%) or disagreed (26.3%) with having negative perceptions towards the use of IWBs in language instruction (item 13) which has the lowest mean score. The mean score of items 11, 16 and 14 can be ordered as 1,96, 1,67 and 1,63, respectively. 77,6 % of teachers strongly disagreed (58.8%) or disagreed (18.8%) with the feeling uncomfortable of using IWBs in front of their students (item 11), in the 16<sup>th</sup> item high percentage of teachers (90,1%) thought that they are not the type to do well with IWB-based applications. Item 14 indicated that only 3.8% of teachers had no idea and 10% of teachers strongly agreed (4%) and agreed (4%) that they have students who are not ready for the IWBs technology.

Table 10

Teachers' Perceptions in Terms of Motivational Matters

		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree	Mean	Std. Deviation
Q17	%	0,00	1,3	5,0	33,8	60,0	4,5250	,65555
	F	0	1	4	27	48		
Q22	%	0,00	5,0	2,5	51,3	41,3	4,2875	,74958
	F	0	4	2	41	33		
Q23	%	0,00	5,0	5,0	46,3	43,8	4,2875	,78262
	F	0	4	4	37	35		
Q21	%	0,00	8,8	10,0	41,3	40,0	4,1250	,91920
	f	0	7	8	33	32		

The statements in the section three demonstrated the motivational issues related to the teachers' perceptions in Table 10. This section analyze whether IWBs technology make learning more enjoyable and more interesting, IWBs increase the interaction and participation of the students, student are more motivated when teachers use an IWB in English lesson young learners' classes and teacher can keep students' attention longer with the help of IWB technology (items 17, 22, 23 and 21). It can be seen that the mean scores of these four items are close to each other, they can be ordered as 4,52, 4,29, 4,29 and 4,12, respectively.

The mean score of item seventeen is 4,52 that is the highest one indicated that almost 94 % percentage of teachers either strongly agreed or agreed to make the lesson more enjoyable and interesting, IWB technology can be used.

In both items 22 and 23, 92,6 % teachers for the 22<sup>nd</sup> item and 90,1 % teachers for the 23<sup>rd</sup> item indicated that they strongly agreed or agreed that interaction and the participation of the students are increased by using IWBs and IWBs increase learners' motivation in the classroom. In a similar manner nearly 81,3 % percentage of teachers

indicated that IWB technology can keep learners' attention longer and 8 of them disagreed with item 21 with the lowest mean score of 4,12.

Table 11

Teachers' Perceptions in Terms of Training

		Strongly Disagree	Disagree	No Idea	Agree	Strongly Agree Mean	Std Deviation
Q18	%	1,3	10,0	16,3	40,0	32,5 3,9250	1,00347
	f	1	8	13	32	26	
Q19	%	12,5	27,5	20,0	26,3	13,8 3,0125	1,26785
	f	10	22	16	21	11	

Table 11, includes two items (18 and 19) which aim to investigate whether teachers need to be trained and they feel comfortable while using IWB or not. The mean score of these items are 3,92 and 3,01, respectively. According to the result of item eighteenth given in Table 10, 72,5 % of teachers strongly agreed (32.5) or agreed (40.0%) that training is required to teach with IWB technology in young learners' language classes. 16.3% of the teachers have no idea and nine of them disagreed(10.0%) and strongly disagreed(1.3%) with the training requirement.

As seen in Table 11 for the nineteenth item, teachers' responses are varied much. Sixteen teachers have no idea about "If they do not get sufficient training, they do not feel comfortable with using IWBs in the classroom. As 40,1 % of teachers strongly agreed (13.8%) or agreed (26.3), 40.0 % of teachers strongly disagreed or disagreed with item nineteen. However, the mean score was 3.

Table 12

Teachers' Perceptions in Terms of Their Competency

Q20	%	E Strongly Disagree	9. Disagree	<b>No Idea</b>	<b>Agree Agree</b> 46,3	Strongly O'928 Agree	<b>ueau</b> 4,0750	6. Std 06016 Deviation
	f	1	5	9	37	28		

Item twenty aims to find out whether teachers have enough information how to use IWB effectively or not. As it can be seen in the Table 12, the mean score of this item is 4,07, which reveals that 82.3% teachers strongly agreed (35.0) or agreed (46.3%) that they can to use IWB in their class effectively. 11.3% of the teachers have no idea and 7.6% of them disagreed and strongly disagreed with being competent.

## 4.2. Open Ended Questions

The final section of the questionnaire includes open-ended questions aiming to elicit additional information or suggestion from EFL teachers about IWB use in young learners' classes. The designated section includes two questions. The initial question was '' Is there any other comment you would like to add about the use of IWBs?'' and the secondary question was ''Any problem or suggestion about the use of IWBs pre-during-and after the class''. In total, eighty participants participated in the study and answered the questionnaire. Twenty four of the participants added comments about IWB use by answering the first question and twenty one of them gave information about the problems they provided faced and suggestions by answering the second question. In order to analyze the data qualitatively, all answers were read several times and the answers were categorized under the headings of common answers.

29 % of the participants who answered the initial question had a common idea that IWBs were enjoyable and effective tools for young learners. They thought that using IWB increased young learners' motivation. When students reached out the IWB to write

a sight word or draw shapes for an activity, they felt motivated and wanted to participate in the activities more. On the contrary, some of teachers who respond the first question state that IWBs are useful but not a necessity in young learners EFL classes because of the fact that young learners should be active in class. Some of the participants add that IWB technology is a must since it provides videos, visuals, audio owing to the fact that children get used to using such kinds of technology in their personal life, outside of the school environment. One of the teachers wrote;

I like to use technology in my classroom otherwise we are becoming fossils. As a young teacher in my career (this is my 3rd year) I like to use interactive whiteboards (smartboards) all the time. By the help of these we can read e-books, we watch videos in the target language. Students are more eager to watch colorful and interesting things because they have tablets and smartboards in their hands at home, in their cars in the restaurants while they are eating. So visuals and screens are interesting for them. It is an undeniable and inevitable fact that IWBs are the savers and these are vital for teaching language especially as a second language. (Participant 48)

Comments based on benefits or drawbacks for teachers are written by the participants. They indicate that IWBs are beneficial tools for teachers by reason of the property of saving previous tasks for the future use and having a chance to make revisions through the saved materials. Additionally IWBs provide wide range of materials and variety. By this means teachers have an opportunity to teach all kinds of pupils with different intelligences at one time. It's also stated that teachers can integrate all skills together with the help of IWB and combined materials. The more applications to use in EFL class, the better teachers get in teaching. One of the teachers remarks that his/her institution does not provide training on IWB use; so if she/he had training, she/he would create more enjoyable and effective activities for young learners. Additionally, the participant teachers specified that EFL teachers may have problems in class while using IWB. In order to prevent students losing attentions, teachers should

have contingency plans. A contrary opinion on IWB use in young learners EFL classes is stated as follows:

In this techno era, I don't think that children are more motivated or concentrated on the lessons when I use an IWB. They get used to use such kinds of technologies throughout their personal life. They use I-pads, computers or mobile phones at home, outside of the classroom. That's why; their attention can be distracted sometimes. And IWBs don't help to keep the child attention longer. They get bored of the lesson after a while. But, we cannot deny its benefits for learners especially for visual ones. In my opinion, there should be a balance between traditional and technological methods during teaching process. We cannot throw away the existence of the teacher in the classroom with the excessive usage of the IWBs. (Participant 64)

The secondary question aiming to obtain suggestions and information about the problems that EFL teachers face pre – during – after the lesson are responded by twenty one participants. Most of the teachers state that they face technical problems such as electricity cut off, internet connection, synchronization problems, sound problems, losing contact. As stated by the teachers, these kinds of problems result in students' loosing attentions, less effective teaching environment and waste of time. Together with this difficulty, the participant teachers suggest that EFL teachers who attempt to use IWB in class should check it beforehand in order to prevent these kinds of technical problems. One of the teachers think even though it is checked beforehand, technical problem is inevitable part of technology use in class. At this juncture, as it is suggested by the participants, young learners' EFL teachers should have additional activities in case and they should have training before taking advantage of IWB to be more effective teachers. One of the participants expresses herself/himself as follows;

During my lessons, in case the electricity or the Internet connection goes off, I must always have a back-up plan. I don't think the use of IWB in English lesson classes has a negative aspect on teaching and learning. I'm learning

new things about this day by day and I think being a teacher requires that. I am always ready to new things about my profession. (Participant 34)

According to some participants, excessive use of technology in young learners' EFL classes causes a boring classroom environment. They remark that in the classroom kids should be active and speak instead of teacher and IWB. As an additional suggestion, it is pointed out that the length of the IWB should be adapted according to the children so as to make them see or contact easily. The last suggestion coming from the 80<sup>th</sup> participant is about saving materials; teachers should save the smartboard page they work on in order to compare and evaluate the lessons easily in the future.

### 4.3 Observation

The present research aimed to reveal how young learners' EFL teachers take advantage of IWBs in their lessons. In order to enlighten this statement, the researcher conducted two observations in two different classes in which the teachers use IWBs connected to their computers. Both teachers had Internet connection in their classes. The researcher aimed to observe how they used IWBs in classroom, what sort of properties of the IWB were benefited by the teachers and what kind of problems or challenges they face within that period. The first observation was recorded as a video and the researcher filled out an observation checklist. The second observation was not recorded as a video; the researcher only found a chance to fill out the observation checklist during the process because it was not allowed. To analyze the observation data, the checklists were compared with the video and commented.

The first observation was made in a preschool classroom. There were 18 students whose ages were 6 and one female English teacher who had 5 of years teaching experience with young learners. The teacher indicated that her students had just learnt how to write and read in English and some of the students were still in their learning process of reading and writing. The researcher observed the class when they had story time through the IWB. The name of the book was ''When I Get Older''. At the first step of the lesson, teacher introduced the book to students by showing the cover picture and

title on the IWB screen. The teacher asked students about their ideas on what the book could be about by communicating with learners. After they discussed about the theme of the book, the teacher turned on the audio-book and students listened to the story from its native reader. Students were not only following the words in sentences by listening to the reader, but also highlighted and animated writing specialty of the book helped learners to listen and follow the text at the same time.

Additionally, students saw the related pictures on the IWB screen while listening to the story. After the audio-reader, the teacher read the book by using her mimes and gestures to help students comprehend the main theme and clarify the unknown vocabulary items through her visuals and mimes. She proceeded to the next step by asking questions related to the pictures and students gave full sentence structured answers such as 'I see a doctor in the picture' 'Doctor is helping the girl in the picture'. She interacted with the kids upon the pictures and asked them to read the sentences one by one. In the following part, the teachers asked students to come to the board and circle the words they had learnt in the classroom as 'sight words' by making a different sentence afterwards such as 'When I grow up, I will <u>be</u> a dentist' or 'He <u>is</u> a bus driver' (the sight words used in the classroom were underlined). In the figure 2, a student can be seen while circling the sight words on the IWB screen. The figure was taken from the recorded video through print-screen.



Figure 2. Circling the sight words on IWB screen

Seven students had a chance to come to the board and draw a circle around the sight words they knew. While they were drawing, the teacher was asking questions by integrating the topic of the page with students' life such as ''What is your favorite book?'' in the librarian's page or ''How do you come to school?'' in the bus driver's page. After they completed all pages in the book, the teacher opened a post activity on the IWB. Three students participated in this activity; they matched the pictures with the related sentences by dragging the boxes. The matching activity was the last step of the lesson. A student who matched the picture with the related sentence can be seen in the Figure 3. The figure was taken from recorded video during the lesson through print-screen.



Figure 3. Matching the sentences with the related pictures

In order to add more about the problems the teacher faced during her lesson, it can be stated whenever she wanted to turn the page to read the book or zoom, she headed to her computer and turned the pages by clicking the mouse; she could not benefit from the screen-touch specialty of the IWB because there was a screen drifting away problem arising from the projector or computer. After the observation, the researcher had a short conversation about the lesson. The teacher indicated that she had a technical problem during the lesson so; she had to control the IWB on the computer. Additionally she indicated she was aware that the lesson took much more time than she planned (50 minutes). She added that this excessive use of technology could make some learners become distracted.

Second observation was carried out in a private primary school with 20 first grade students whose ages were seven and eight. The teacher in the class had 7 years' experience of teaching English to young learners. At the first step of the lesson, she did not take advantage of IWB. Instead of that, students played a short vocabulary game as a pre-activity and wrote the words with their meanings in their notebooks. After revising the unknown words, the teacher drew the curtains to make the class darker and turned

off the lights and made learners watch a video about wild animals for 5 minutes. All students watched the video curiously and silently in their seats. It was clearly observed that the teacher had prepared her materials before IWB use because her materials such as video, written post questions as a word document, and the game were in a folder on the desktop. The following step of the lesson included post-questions about the video. She randomly chose students and asked questions related to the video such as "Which animals can catch other animals easily?" Students answered in full sentence structures by trying to use the words they had just learnt in the same lesson. The question-answer section was in advance of another vocabulary game on the IWB screen. The teacher opened ''pop the balloon game'' on computer. She divided students into two groups and asked them to come and pop the words they hear from the amplifier. Students had a chance to see and play the game on the large screen of the IWB. Each time two students from different groups stood and faced to the IWB screen. When they heard the words, they quickly run to the screen and tried to touch the right balloon, in which there was the mentioned word, to get a point for their teams. The students seemed to have fun and both groups won the game. The pop the balloon game was the final phase of the lesson. Additionally, some problems were observed during the lesson. Firstly, even if the teacher turned off the lights and drew the curtain, the sunlight prevented students to see what was on the screen clearly. The second observed problem was about technical drawback of the IWB use; when the students came to the board and touched the words in the balloons, some calibration drifts occurred. The teacher intervened in the problem simultaneously by controlling the touched areas on her computer screen with the mouse. The researcher found a chance to discuss the lesson with the teacher shortly. The teacher confirmed the technical problems observed in the class however she added that she was able to control the problems as soon as possible in order to prevent students' lose attention.

To sum up in regards to the checklist on how teachers used IWB in their classes, it can be said that they benefited from most of the features of the IWB in their EFL classes. Not only teachers, but also students used some of the features. Teachers

highlighted or underlined the texts of a part of text on the screen both with the stylus pen or finger. An example teacher underlying a word during the lesson can be seen in the Figure 4. This figure was taken from the recorded video in the class through print-screen. Teachers used specific software during the lesson. Students used drag and drop function in the last activities. Teachers played video or audio files during the class. They saved the activities they did during the class. Teachers did not search for something during the internet but they did it before the lesson to prepare materials. They did not have a wireless keyboard. The other specialties mentioned in the checklist were not benefited from during the lessons since they did not need them such as printing the works, navigating the text.



Figure 4. Teacher highlighting a part of the text

#### 4.4. Interviews with the teachers

Young learners' EFL teachers' opinions about their competency for using IWB in classroom environment were collected through the teacher semi-structured interview in order to obtain more detailed information about the attitudes of the teachers on IWB use. Three volunteered teachers participated in the interview and two of the teachers were inservice young learners' EFL teachers working in a private primary school and one of

them was in-service young learners' EFL teacher working in a private preschool. Three main questions and one sub-question were asked to the participants. The questions were asked first preschool teacher, then primary school teachers in order.

On the basis of the first question it was aimed to find EFL teachers' perceptions of their competency for using IWB in young learners' classes. Teachers' were asked "What do you feel about your competency for using IWB in EFL classes with young learners?". The first interviewee indicated her competency as sufficient for young learners as;

In my opinion, I have the ability to use IWB. When I use IWB in my classroom, I don't need help. I don't have an idea about complex computer stuff but I can handle my classes with what I know. (Interviewee 1)

The second interviewee stated that she was competent enough to use IWB in her classes with young learners because of the fact that she got training when she was a research assistant in a university. She added that without being competent enough, she wouldn't feel confident in front of her students while using IWB. On the contrary, the third interviewee viewed from different aspect by specifying that she was not type of the technological person and for this reason she felt that her competency for using IWB was under how it would be. She added that she tried to improve herself in using IWB and complying with the technology.

The second question was designed to obtain information about the support that administrators supply to teachers with its sub-question aiming to get teachers' opinion about how the supports should be. The first interviewee indicated that her administrators didn't give any training about IWB use in classroom and she added;

I think administrators should give training as orientation programs for the teachers before the education year begins. With this way, teachers feel more confident and take advantage from this technology with different aspects. (Interviewee 1)

The similar reflection came from the second interviewee by adding that teachers would deal with the technical problems when they come across during the classes. The

last interviewee who struggles with the technology indicated that her administrators didn't support any training for IWB use. She remarked as follows;

I think administrators should not trust their teachers this much. Whenever I have technical problem about IWB in classroom, I had to chance the activity since I cannot know how to solve my problem but my administrators think that I can solve it. They should assist teachers whenever they need help about IWB in class. (Interviewee 3)

When inquired about the third question, ''Do you think it is necessary to use IWB in young learners' EFL classes?'', each participants took different approach to the necessity point. The first interviewee stated that she was not sure about the necessity of IWB use in young learners' EFL classes but she believed it's a beneficial tool which gave teachers a chance to manage classes with different kinds of activities. Second interviewee remarked that it was necessary to use IWB in young learners' English classes since it provides variety. She added:

In my opinion IWBs should be in young learners' EFL classes because it provides variety. Everybody has a common opinion that if you work with young learners, you should have great amount of materials and activities since kids lose their attention easily in classes. IWBs give us a chance to reach wide variety of materials. (Interviewee 2)

The last participant did not believe IWB is a necessity in young learners' EFL classes. Her perceptions about this topic were that young learners should move, act, interact, play; they should not sit and watch what was on the IWB screen to learn a new language. She thought that it's not possible to escape from technology in this digital age. She believed that the EFL teachers, who took advantage from IWB in classes with young learners, grew lazier and lazier by opening just a video or a game for a long time to make learners be quiet and sit.

#### 4.5 Summary of the Results

The research findings are discussed in relation to four research questions written above. All of the teacher participants indicated that they had positive perceptions towards using IWBs in young learners' EFL classes. They confirmed that IWBs supplied wide range of materials for young learners by appealing to learners who had different learning styles. The open-ended and questionnaire results showed that participants accepted IWB as enjoyable and beneficial tools for young learners in terms of reaching wide range of materials. The observation findings supported this statement, too.

The interview findings showed that teachers have some challenges while using IWBs in their classes such as technical problems, calibrations problems, sunlight, and length of the IWB. The answers of open-ended questions given by the participants were parallel with the technical problems issue. It can be deduced from participants' specifications that those kinds of problems can be solved through training programs provided by the school administrations. However, the participants in the present study felt competent enough to use IWB in young learners' EFL classes even though they agreed that training was a must. Additionally, the findings show that young learners' EFL teachers use IWBs effectively and interactively in classroom.

#### Chapter 5

#### **Discussion and Conclusion**

The purpose of the current study was to investigate the perceptions of young learners' teachers about using IWBs in English foreign language classrooms. The study also aimed to identify how they integrate this technology in teaching young learners English and what kind of challenges they face pre-while-after teaching. The teachers' perceptions were examined from five different aspects; teachers' perceptions in terms of teaching, teachers' general perceptions towards IWB use in young learners' EFL classes, teachers' perceptions in terms of motivational matters, teachers' perceptions in terms of IWB training, teachers' perceptions in terms of their competency. Both qualitative and quantitative data were gathered throughout the study process. The present case study integrated data triangulation for an in-depth analysis as explained in Methodology Chapter.

The present study aimed to find answers for the research questions below;

- 1. What are the perceptions of young learners' EFL teachers' towards the use of IWBs in classroom setting?
- 2. How do the young learners' EFL teachers use IWBs in their classes?
- 3. What are the challenges they face pre-during-after the use of IWBs in EFL classes with young learners?
- 4. What are the teachers' perceptions of their competency for using IWB in EFL classes with young learners?

This chapter addressed the discussion of findings and results of the study. Firstly, summary of the research findings is presented. Pedagogical implications, recommendation for the further research and conclusion were presented after the conclusion part. The findings of the present study were discussed according to the research questions under the four headings below.

# 5.1 Young learners' EFL teachers' perceptions towards IWBs

The first research question addressed young learners' EFL teachers' perceptions towards using IWB in classroom. As findings showed participant teachers had positive perceptions towards IWB use with young learners. It should be added that one of the most significant reason caused teachers to have positive perceptions was that IWB provides wide range of materials for young learners such as visuals, videos, stories, games, etc. In addition to this, having an opportunity to save and print the materials composed in the lesson positively contribute to their perceptions towards IWB use. The finding from different data instruments supported the idea that teachers' positive perceptions towards IWB. As they indicated during the interview and in the open-ended questions that IWBs are pleasurable and beneficial tools for young learners in EFL classes. Even if one of the interviewee stated that she was not sure about its necessities, she believed that IWBs are beneficial supplementary tools. One contrast thought came from two participants that young learners should be active in the lessons to learn the target language therefore IWBs should not be the main tool in teaching process, which contributes to the literature on a different aspect.

The positive perceptions of EFL teachers toward IWB use were found in various researches in the literature. In the Elaziz's (2008) study, both teachers and the students had positive perceptions towards IWB use. The participants of Gashan and Alshumaimeri's (2015) research indicated they had positive perceptions towards IWB use by stating IWB provide various techniques, activities and strategies into practice. In this study, it was accepted that using IWBs in young learners EFL classes enable teachers to explain and summarize the topics easily by the help of using various materials and saving time. This finding is supported by Gashan's (2015) study which indicated that IWB improve teaching and learning process in EFL classes by giving teachers an opportunity to implement wide range of materials in their teaching.

# 5.2 The use of IWB by young learners' EFL teachers

On the basis of second research questions, how young learners' EFL teachers take advantage of IWBs in their classes was investigated through observation and questionnaire. The results of the observations showed that they use IWB interactively in their classes by giving opportunities to learners to participate in the activities actively, which resulted in student-centered learning environment. In young learners' EFL classes, teachers mostly take benefit from visuals, e-books, readings, videos, games, audios as observed in the present study. When it was used effectively, a teacher-centered classroom environment does not occur. It depends on the teachers giving opportunities to learners to interact with other students or the teacher as it was observed in the first observation. With this way, the teachers are able to use IWB for different skills; speaking, reading, listening, grammar and integrated skills. Additionally young learners benefit from IWBs in terms of post activities needed in EFL classes. They played vocabulary games, circled the related words, and completed a matching activity. All those activities gave learners an opportunity to participate in class actively, which resulted in learners' motivation and enjoyable learning environment. Furthermore, teachers using wide range of materials during the lesson supported the findings of openended questions, questionnaire and interviews. As it was mentioned in the open-ended questions' answers, by using IWB in EFL classes, teachers were able to teach different learning styled students at one time. It was also observed in the classes: kinesthetic learners came to smartboard and drew circles around the words, visual learners benefited from the visuals on the screen, auditory learners took advantage of audio reading from a native reader, tactile learners found a chance to touch the screen and do the activities.

Because of the reason that young learners have short attention-span and teachers need various activities even in one lesson (Cameron, 2003), IWBs have significant role in EFL classes as it was found in the present study. It provided teachers with different sources during the lesson such as videos, e-books, interactive games, visuals, and animations. Saving and printing materials created during the lessons was declared one of the most advantages of the IWBs. Moreover, teachers stated that they satisfy the needs

of visual, tactile, kinesthetic, and auditory learners with the help of mentioned sources. As it was concluded in Aytaç's (2013) study, IWBs increase students' attention during the lesson. In addition to this, Hall and Higging's (2005) study supported the idea that the multimedia elements help teachers attract student attention and increase their participation in class activities. It was inferred in this study that based on what the teachers stated and what was observed in the classes based on the needs of the students in language teaching, when use IWBs advisedly tend to increase student motivation, interaction and participation.

#### 5.3 The challenges young learners' EFL teachers faced

Even if the participant teachers' perceptions about IWB use in young learners' EFL classes were positive, they stated that there were some challenges they faced. It was found that participants experienced technical problems pre-during-after IWB use in classroom. The open-ended questions and interview findings supported this statement. Although they had additional activities in case of technical problems such as calibration, disconnection, power cut, problems about projector, problems with computer, it was concluded that those kinds of problems distracted young learners' attention easily. Technical problems were referred in the findings of various studies as the main challenge of teachers' challenges that face in their foreign language teaching process (Aytaç, 2013; Elaziz, 2008; Gashan, 2015; Öz, 2014; Saraç, 2015; Yaratan & Kural, 2010). According to some participants, excessive use of technology in young learners' EFL classes caused a boring classroom environment. They remarked that kids should be active while learning a foreign language and speak instead of teacher and IWB. Furthermore, in some classrooms sunlight prevented the sight of the IWB screen, which results in disturbing learners' concentration. In some of the classrooms, teachers complained about the length of the IWB. It was pointed out that the length of the IWB should be adapted according to the children.

# 5.4 Young learners' EFL teachers' perceived competency

As for the last research question asking young learners' EFL teachers' perception about their competency of using IWB in classroom, data analysis revealed that young learners' EFL teachers felt competent enough to use IWB in classroom. From the viewpoint of some of the participants, it was clear that teachers do not have to become so proficient at IWB since they use it in young learners' EFL classes in terms of the areas of usage. Clearly, they indicated that in order to read an e-book, show visuals, make students watch a video, make learners listen to an audio, they do not have to be so proficient; these areas of usage could be overcome by the teachers who used computers in their daily life. This idea was supported by one of the interviewees. The present study underlines that although the participant teachers felt they were competent enough to use IWB in young learners' EFL classrooms, they support the idea that teachers should have training beforehand in order to integrate IWB in their lessons. The necessity of training was also mentioned in the open ended questions by indicating if the teacher had training, she would create more enjoyable activities for her learners. Additionally, the findings of the questionnaire supported this idea with 32% of the participants' statements. It was found out that technical training should be included supposing that administration will not be able to provide technical support during the lessons. The literature also supported this idea by clarifying that teachers need more training to comprehend how to handle IWB and solve their technical problems (Gashan, 2015; Saraç, 2015; Shams & Ketabi, 2015; Türel & Johnson, 2012).

#### **5.5 Pedagogical Implications**

The findings of the present study suggest that training should be provided by the administrators beforehand. As it was also discussed in Elaziz's (2008) study, training could be provided according to teachers' proficiency in technology in terms of experience, skills, and knowledge. After operational training is ensured, pedagogical training should be provided for the young learners' EFL teachers (Türel & Johnson, 2012; Manny-Ikan et.al., 2011).

In this new era, students are exposed to technology in early years. Benefiting from IWBs in the classroom may not be enthusiastic for some learners who get used to the novelty of this technology. In these kinds of situations, it may be hard for the teachers to attract those students' attention even if they represent very effective and creative activities. As it was suggested in the open-ended questions and during the interviews, teachers should have variety of materials to use in their lesson for young learners in the event of learners' losing attention. They should have additional activities both related to the IWB technology and other kinds of activities such as games, paper work, speaking and kinesthetic activities since excessive use of technology may result in boring classroom environment. Additionally, having a backup plan will assist teachers to overcome the situations occurring during the case of technical problems.

Software developers and publishers have a big role about designing software and prepare IWB based resources that can be used in language classrooms. Resulting from the fact that IWB has been in use in language classes for short time, reaching online IWB based resources and software is not so easy. Administrators of schools and departments may have contact with the publishers and software developers to support the IWB use in EFL classes. Teachers should be given opportunity to reach quality free resources in order to use in their classes related to their topics. With this way, teachers will not waste their time in preparing materials; instead they will improve their knowledge about technology use in language education.

#### 5.6 Recommendations for Further Research

For further research, a longitudinal study may be conducted in order to obtain more detailed data. The present study included mixed data collection methods including questionnaire, open-ended questions, observation, and interviews. Even though the fact that the present study included both qualitative and quantitative data, more observations in different age groups of young learners' classes can be made in order to obtain more detailed information about IWB use in young learners' EFL classes. Furthermore, in this study the administrators' perceptions are unknown. It would contribute to the study

having an interview with the administrators in the matter of their support on training, perceptions, and experiences.

This study basically aimed to find teachers' perceptions towards IWB use in young learners EFL classes. The students' perceptions toward IWB use in their EFL classes were not investigated due to the fact that they were very young to give elaborative information. It may be suggested for further research that primary school students' perceptions can be investigated through the instrument of interview or making them draw a picture of their experiences in IWB classes.

The small number of the teachers participated in the study. In further research, more than eighty participants can be included in the study in an attempt to reach various ideas related to the topic.

#### 5.7 Conclusion

This study investigated the perceptions of young learners' EFL teachers towards using IWB in classroom, how they benefit from IWBs in classes, the challenges they face, and their perceived competence. The results of the study showed that young learners' EFL teachers had positive perceptions towards IWB use in language education and they liked using it in their lessons. According to the participants' perceptions it can be concluded that IWBs are good supplement to support teaching in young learners' EFL classes and it enables teachers to reach wide range of materials easily by allowing teachers to display these materials on a large screen. The perceptions about motivation of the learners were positive. The results of teachers' perceptions and observations indicated showed that when used effectively; with sound pedagogy, interacting active participation of the learners, IWB provide affordances that could lead to more student participation, motivation, and engagement, which supports language learning.

Related to training issue, even though most of the teachers felt that they were competent enough to use IWB in young learners' EFL classes, they should be provided with training according to their personal knowledge, background, and technology skills. The areas of usage of IWB might be extended in EFL classes by this means.

Furthermore the teachers should be organized when using IWB in young learners' EFL classes due to the fact that young learners need to be active while learning and they have short attention-span.

#### **REFERENCES**

- Ahmad, K., Corbett, G., Rogers, M. and Sussex, R. (1985). *Computers, language learning and language teaching*. Cambridge: Cambridge University Press.
- Akcay, A. O., Arslan, H., & Guven, U. (2015). Teachers' Attitudes toward Using Interactive WhiteBoards. *Middle Eastern & African Journal of Educational Research*, (17), 22-30.
- Al-Awidi, H. M., & Ismail, S. A. (2012). Teachers' Perceptions of the Use of Computer Assisted Language Learning to Develop Children's Reading Skills in English as a Second Language in the United Arab Emirates. *Early Childhood Education Journal Early Childhood Educ J*, 42(1), 29-37. doi:10.1007/s10643-012-0552-7
- Al-Faki, I. M. & Khamis, A.H. A. (2014). Difficulties Facing Teachers in Using Interactive Whiteboards in their Classes. Vol.3 No.2. pp. 136-158.
- Al-Saleem, B. I. (2012). The interactive whiteboard in English as a foreign language (EFL) classroom. *European Scientific Journal*, 8(3), 1857-7881.
- Amiri, R., & Sharifi, M. (2014). The Influence of Using Interactive Whiteboard on Writings of EFL Students Regarding Adverbs. Procedia *Social and Behavioral Sciences*, 98, 242-250.
- Aykaç, O. A.; Arslan, H. and Güven, U. (2015). Teachers' Attitudes towards Using Interactive Whiteboards.17. pp. 22-30.
- Aytaç, T. (2013). Interactive Whiteboard factor in Education: Students' points of view and their problems. *Academic Journals*, 8(20), 1907-1915.
- Aytekin, I., Abdulaziz, A. F., & Barakat, H. H. (2012). Saudi Secondary School Teachers Attitudes' towards Using Interactive Whiteboard in Classrooms. *The Turkish Online Journal of Educational Technology*, 11(3), 286-296.
- Balta, N., & Duran, M. (2015). Attitudes of Students and Teachers towards the Use of Interactive Whiteboards in Elementary and Secondary School Classrooms. *Journal* of Educational Technology. 14/2. 15-23

- Bandu, D. J. (2015). Teaching English for Young Learners. *Paedagogia: Jurnal Pendidikan*, 1(1), 69-77.
- Basmatzi, S. (2014). Interactive Whiteboards: EFL Teachers' Practices and Pedagogy in the Greek Reality. *Research Papers in Language Teaching and Learning*, *5*(1), 324-350. Retrieved February 16, 2016, from <a href="http://rpltl.eap.gr">http://rpltl.eap.gr</a>
- Beatty, K. (2003). *Teaching and researching computer-assisted language learning*. New York: Longman.
- Bell, M. A. (2002). Why Use an Interactive Whiteboard? A Baker's Dozen Reasons!

  Retrieved February 13, 2016, from <a href="http://www.teachers.net/gazette/JAN02/mabell.htm">http://www.teachers.net/gazette/JAN02/mabell.htm</a>
- Betcher, C., & Lee, M. (2009). The interactive whiteboard revolution: Teaching with IWBs.
- Biro, P. (2011). Students and the Interactive Whiteboard. *Acta Didactica Napocensia*, 4(2), 3<sup>rd</sup> ser., 29-38.
- Blake, R. (2008). *Brave New Digital Clasroom* (Master's thesis). Georgetown University, Washington, D.C.
- Brezinova, J. (2009). *Interactive Whiteboard in Teaching English to Young Learners* (Master's thesis). Masaryk University, Brno, Chech Republic.
- Brindley, J., Walti, C., & Blaschke, L. (2009). Creating Effective Collaborative Learning Groups in an Online Environment. 10/3
- Brown, B. (2003). Interactive Whiteboards in Education. TechLearn. Retrieved February 15, 2016, from http://www.techlearn.ac.uk/
- Bruce, B. C. (1990). Roles for Computers in Teaching the English Language Arts.

  University of Illinois at Urbana-Champaign
- Cameron, L. (2003). Challenges for ELT from the expansion in teaching children. *ELT Journal*, 57(2), 105-112. doi:10.1093/elt/57.2.105
- Chapelle, C. (1997). CALL in the year 2000: Still in search of research paradigms?. *Language Learning & Technology*, *1*(1), 19.

- Chapelle, C. (2001) Computer applications in second language acquisition: Foundations for teaching, testing and research. New York: Cambridge University Press.
- Chapelle, C.A. (2003). *English language learning and technology*. Amsterdam: John Benjamins.
- Cogill, J. (2002). How is the Interactive Whiteboard being used in the primary school and how does this affect teachers and teaching? (PhD Dissertation)
- Cohen, D., & Crabtree, B. (2006). Qualitative research Guidelines Project. Retrieved from http://www.qualres.org/HomeSemi-3629.htm
- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2003). Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research*, 209-240.
- Davies, G. (2010). Computer-assisted language education. In Berns, M. (ed) Concise encyclopedia of applied linguistics. Elservier Ltd.
- Digregorio, P., & Sobel-Lojeski, K. (2009). The Effects of Interactive Whiteboards (IWBs) on Student Performance and Learning: A Literature Review. *Journal of Educational Technology Systems*, 38(3), 255-312. doi:10.2190/et.38.3.b
- Dudakova, L. (2013). *Teaching English Effectively with an Interactive Whiteboard* (diploma thesis). Charles University, Prague, Chech Republic.
- Eke, V. E. (2014). Turkish Students' Opinions towards the Use of Tablet PCs and Interactive Whiteboards in EFL Classrooms (Master's thesis). Çağ University, Mersin, Turkey.
- Elaziz, F. (2008). Attitudes of Students and Teachers towards the Use of Interactive Whiteboards in EFL Classrooms (Master's thesis). Bilkent University, Ankara, Turkey.
- Ersöz, A. (2000). Six Games for the EFL/ESL Classroom. *The Internet TESL Journal*, 6(6). Retrieved from <a href="http://iteslj.org/Lessons/Ersoz-Games.html">http://iteslj.org/Lessons/Ersoz-Games.html</a>
- Ersöz, A. (2007). Teaching English to young learners. Ankara: Kozan Ofset.

- Faki, I. M., & Khamis, H. A. (2014). Difficulties Facing Teachers in Using Interactive Whiteboards in Their Classes. *American International Journal of Social Science*, 3(2), 136-158.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (1993). *How to design and evaluate research in education* (Vol. 7). New York: McGraw-Hill.
- Gashan, A. K., & Alshumaimeri, Y. A. (2015). Teachers' Attitudes toward Using Interactive Whiteboards in English Language Classrooms. *International Education Studies IES*, 8(12), 176.
- Gerard, F., Widener, J., & Greene, M. (1999). Using Smart Board in Foreign Language Classes. Educational Resources Information Center (ERIC).
- Glover, D., & Miller, D. (2001). Running with technology: The pedagogic impact of the large scale introduction of interactive whiteboards in one secondary school. *Journal of Information Technology for Teacher Education*, 10(3), 257-276.
- Glover, D., Miller, D., Averis, D., & Door, V. (2007). The evolution of an effective pedagogy for teachers using the interactive whiteboard in mathematics and modern languages: An empirical analysis from the secondary sector. *Learning*, *Media and Technology*, 32(1), 5-20.
- Gursul, F., & Tozmaz, G. B. (2010). Which one is smarter? Teacher or Board. *Procedia Social and Behavioral Sciences*, 2(2), 5731-5737.
- Hall, I., & Higgins, S. (2005). Primary school students' perceptions of interactive whiteboards. *Journal of Computer Assisted Learning*, 21(2), 102-117.
- Harley, B., & Wang, W. (1997). The critical period hypothesis: Where are we now. *Tutorials in bilingualism: Psycholinguistic perspectives*, 19-51.
- Hartoyo, M. (2006). Individual Differences in Computer Assisted Language Learning (CALL). Semarang: Universitas Negeri Semarang Press.
- Harwell, M. R. (2011). Research design in qualitative/quantitative/mixed methods. CONRAD, Clifton F.; SERLIN, Ronald C. The SAGE Handbook for Research in Education: Pursuing ideas as the keystone of exemplary inquiry. 2<sup>a</sup> Edition. Thousand Oaks, CA: SAGE Publications, 147-163.

- Higgins, A.; Giglioli, A. and O'Sullivan, W. (2011). Training Programme on Interactive Whiteboards for VET Teachers.
- Hur, J. W., & Suh, S. (2012). Making Learning Active with Interactive Whiteboards, Podcasts, and Digital Storytelling in ELL Classrooms. *Computers in the Schools*, 29(4), 320-338. doi:10.1080/07380569.2012.734275
- Iacob, I (2009). The Effectiveness of Computer Assisted Classes for English as a Second Language. *Annals. Computer Science Series*. Vol, 7.1
- Indrawati, E. D, (2009) Advantages and Disadvantages of CALL (Computer Assisted Language Learning)
- Ishtaiwa, F.F. & Shana, Z. (2011). The use of interactive whiteboard (IWB) by preservice teachers to enhance Arabic language teaching and learning. *Learning and Teaching in Higher Education: Gulf Perspectives*, 8(2). http://lthe.zu.ac.ae
- İbrahim, A. I. (2010). Information & Communication Technologies in ELT. *Language Teaching and Research*. 1/3. 211-214
- Johnson, J. S., & Newport, E. L. (1991). Critical period effects on universal properties of language: The status of subjacency in the acquisition of a second language. Cognition, 39(3), 215-258. doi:10.1016/0010-0277(91)90054-8
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, *33*(7), 14-26.
- Kalanzadeh, G. A. (2015). Attitudes of Iranian Administaraors, Students and Teachers towards the Use of Interactive Whiteboards in EFL Classrooms a Case Study in Andimshk High Schools. *Modern Journal of Language Teaching Method*. 5/1. 150-169.
- Kasapoğlu-Akyol, P. (2010). Using Educational Technology Tools to Imptove Language and Communication Skills of ESL Students. 4 (2), 225-241.
- Klímová, B. F. CALL in teaching English to young learners. In *LLCE2014: Conference Proceedings* (p. 48).
- Krashen, S. (1981). Second language acquisition. Second Language Learning, 19-39.

- Krashen, S. (1982). Principles and practice in second language acquisition (Vol. 2). Pergamon: Oxford.
- Krefting, L. (1991). Rigor in Qualitative Research: The Assessment of Trustworthiness. *The American Journal Occupational Therapy*, 45, 3rd ser., 214-222.
- Lacabex, E. G., and del Puerto, F. G. (2014). Two Phonetic-Training Procedures for Young Learners: Investigating Instructional Effects on Perceptual Awareness. 70,4 pp, 500-531
- Lai, C.C. & Kritsonis, W.A. (2006). The Advantatages and Disadvantages of Computer Technology in Second Language Acquisition.
- Lee, K (2000) English Teachers' Barriers to the Use of Computer-assisted Language Learning. *The Internet TESL Journal*, Vol. VI, No. 12. Retriewed from http://iteslj.org/Articles/Lee-CALLbarriers.html
- Lee, M., & Boyle, M., (2004) "Richardson Primary School. The Richardson Revolution." *Educare News*.
- Lee, M. & Winzenried, A. (2009). The use of instructional technology in schools. Melbourne: ACER Press.
- Lee, S (2008) Teaching pronunciation of English using Computer Assisted Language Software: An action research Study in an Institute of Technology in Taiwan. PhD Dissertation.
- Lefever, S. (2007). English for Very Young Learners. *Malfridur*, 18(22), 27-31.
- Lenneberg, E. H., Chomsky, N., & Marx, O. (1967). *Biological foundations of language* (Vol. 68). New York: Wiley.
- Levy, M. (1999). Theory and design in multimedia CALL project in cross-cultural pragmatics. Computer Assisted Language Learning, 12,1, 29-57.
- Lin, G. H. C. (2008). Pedagogies Proving Krashen's Theory of Affective Filter. *Online Submission*.
- Maher, D., Phelps, R., Urane, N., & Lee, M. (2012). Primary school teachers' use of digital resources with interactive whiteboards: The Australian context. *AJET Australasian Journal of Educational Technology*, 28(1). doi:10.14742/ajet.888

- Manny-Ikan, E., Dagan, O., Tikochinski, T. B., & Zorman, R. (2011). Using the interactive whiteboard in teaching and learning An evaluation of the Smart Classroom pilot project. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 249-273.
- Manzo, K. K. (2010). Beyond Teacher Chalk Talk. *Digital Directions*, 7, 34-35. Retrieved from www.digitaldirections.org.
- McNeil, A. (2000). Computer-Assisted Instruction- Its Value to Second Language Learners. (Master's Thesis). Wayne State University.
- Moon, J. (2005). Children learning english. Macmillan.
- Moras, S. (2001). Computer-Assisted Lanaguage Learning (CALL) and the Internet. Karen's Linguistic Issues.
- Murcia, K. (2010). Interactive and multimodal pedagogy: A case study of how teachers and students use interactive whiteboard technology in primary science. *Australian Journal of Education*, 58(1), 74-88.
- Murray, G. (2011). Metacognition and imagination in self-access language learning. In D. Gardner (Ed.), Fostering autonomy in language learning (pp. 5-16). Gaziantep: Zirve +University. Retrieved from <a href="http://ilac2010.zirve.edu.tr">http://ilac2010.zirve.edu.tr</a>
- Olsen, W. (2004). Triangulation in social research: qualitative and quantitative methods can really be mixed. *Developments in sociology*, 20, 103-118.
- Öz, H. (2014). Teachers' and Students Perceptions of Interactive Whiteboards in English as a Foreign Language Classroom. *The Turkish Online Journal of Educational Technology*, *13*(3), 156-177.
- Rahimpour, M. (2011). Computer assisted language learning (CALL). *International Journal of Instructional Technology and Distance Learning*, 8(1), 3-9.
- Ravichandran, T. (2000). Computer assisted language learning (CALL). In the perspective of interactive approach: advantages and apprehensions.
- Roblyer, M. D., & Wiencke, W. R. (2004). Exploring the interaction equation: Validating a rubric to assess and encourage interaction in distance courses. *Journal of Asynchronous Learning Networks*, 8(4).

- Salaberry, R. (1999). CALL in the year 2000: Still developing the research agenda. Language Learning and Technology, 3(1), 104-107.
- Saltourides, E. (2009). The sociocultural impact of technology on adult immigrant English as a second language learners.
- Saraç, M. (2015). An Explanatory Investigation on the Turkish EFL Teachers' and Their Attitudes toward the Use of Interactive Whiteboards (Master's thesis). Anadolu University, Eskişehir, Turkey.
- Schmid, C. (2006). Investigating the Use of Interactive Whiteboard Technology in the English Language Classroom through the Lens of a Critical Theory of Technology. *Computer Assisted Language Learning*, 19(1), 47-62.
- Schneiderova, P. (2013). *The Effective Classroom Management in Young Learners'*Language Classes (bachelor thesis). Masaryk University, Brno, Chech Republic.
- Scott, W., & Ytreberg, L. (c1990). Teaching English to children. New York: Longman.
- Shams, N., & Ketabi, S. (2015). Iranian Teachers' Attitudes towards the Use of Interactive Whiteboards in English Language Teaching Classrooms. *Journal of Applied Linguistics and Language Research*, 2(3), 84-99.
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Shin, J.K. (2006). Ten helpful ideas for teaching English to young learners. *English Teaching Forum*, 44(2), 2-7, 13.
- Skinner, A.; Ludwig, B.; & Judin, M. (2015). Computer Assisted Language Learning
- Skinner, B., & Austin, R. (1999). Computer conferencing: Does it motivate EFL students? *ELT Journal*, 53(4), 270-279
- Smith, H. J., Higgins, S., Wall, K., & Miller, J. (2005). Interactive whiteboards: boon or bandwagon? A critical review of the literature. *Journal of Computer Assisted Learning*, 21(2), 91-101.
- Smith, P. L. (2016). Computer Assisted Language Learning (CALL) for TEYL. *The international TEYL Journals*. Retrieved from <a href="http://www.teyl.org/article1.html">http://www.teyl.org/article1.html</a>

- Somyürek, S., Atasoy, B., & Özdemir, S. (2009). Board's IQ: What makes a board smart? *Computers & Education*, 53(2), 368-374.
- Şad, S. N., & Özhan, U. (2012). Honeymoon with IWBs: A qualitative insight in primary students' views on instruction with interactive whiteboard. *Computers & Education*, 59(4), 1184-1191. doi:10.1016/j.compedu.2012.05.010
- Tanner, H., & Jones, S. (2007). How Interactive Is Your Whiteboard? *Mathematics teaching incorporating micromath*, 200, 37-41.
- Taylor, R. (1980). The computer in the school: tutor, tool, tutee. New York: Teachers College Press.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of computer assisted learning*, 21(3), 217-228.
- Toor, H. R. (2013). What are the attitudes and perceptions of students, teachers and management towards the use of interactive whiteboards in our EFL classrooms at English language institute, Saudi Arabia? (Master's thesis). University of Sunderland, England.
- Toscu, S. (2013). The Impact of Interactive Whiteboards on Classroom Interaction in Tertiary Level English as a Foreign Language Classes (Master's thesis). Bilkent University, Ankara, Turkey.
- Türel, Y. K. (2012). Teachers' Negative Attitudes towards Interactive Whiteboard Use: Needs and Problems. *Elementary Education Online*, *11*(2), 423-439. Retrieved from http://ilkogretim-online.org.tr
- Türel, Y. K., & Demirli, C. (2010). Instructional interactive whiteboard materials: Designers' perspectives. *Procedia Social and Behavioral Sciences*, *9*, 1437-1442. doi:10.1016/j.sbspro.2010.12.346
- Türel, Y. K., & Johnson, T. E. (2012). Teachers' Belief and Use of Interactive Whiteboards for Teaching and Learning. *Educational Technology & Society*, 15 (1), 381–394.
- Warschauer M. (1996) "Computer Assisted Language Learning: an Introduction". In Fotos S. (ed.) *Multimedia language teaching*, Tokyo: Logos International: 3-20.

- 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.15-25.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57-71.
- Warschauer, M., & Kern, R. (2005). Network-based language teaching: Concepts and practices. Cambridge: Cambridge University Press.
- Yang, Y.T.C. (2008). A catalyst for teaching critical thinking in a large university class in Taiwan: A synchronous online discussing with the facilitation of teaching assistant. *Education Tech Research*, 56, 241-264
- Yaratan, H., & Kural, C. (2010). Middle School English Language Teachers' Perceptions of Instructional Technology Implementation in North Cyprus. *Educational Technology*. 9/2.161-174.
- Yeasmin, S., & Rahman, K. F. (2012). Triangulation'research method as the tool of social science research. *Bup Journal*, *I*(1), 154-163.
- Yıldırım, R., & Torun, F. P. (2014). Exploring the value of animated stories with young English language learners. *The Turkish Online Journal of Educational Technology*, 13(4), 47-60.
- Yin, R.K., (1984). Case Study Research: Design and Methods. Beverly Hills, Calif: Sage Publications.
- Wong, K. T., Goh, P. S., & Osman, R. (2013). Affordances of Interactive Whiteboards and Associated Pedagogical Practices: Perspectives of Teachers of Science with ChildrenAged Five to Six Years. *The Turkish Online Journal of Educational Technology*, 12(1), 18.
- Zainal, Z. (2007). Case study as a research method. *Jurnal Kemanusiaan*, 9, 1-5.

#### **APPENDICES**

#### A: Questionnaire for the Teachers

Dear participant,

This study is conducted in MA TEFL Program in Bahcesehir University. It aims to investigate attitudes and perceptions of teachers towards the use of interactive whiteboards in EFL classrooms with young learners. This questionnaire for teachers is the first phase of my study. You can be sure that all the personal data provided from questionnaires will be kept strictly confidential in my reports. Thank you in advance for your help and contribution.

# **Section I: General Information**

- 1. Your age: 20-25 \_ 26-30 \_ 31-35 \_ 36-40 \_ 41-45 \_ 46-Above \_
- 2. Gender: Male \_ Female \_
- 3. Type of your institution/school you teach at:

Preschool\_ Primary \_ Language School \_

- 4. Years of teaching experience:
- 1-5 years \_ 6-10 years \_ 11-15 years \_ 16-20 years \_ 21- above \_
- 5. How many hours do you teach with an interactive whiteboard in English classes in a week?
- 1-2 hours a week \_ 3-5 hours a week \_ 6-10 hours a week \_
- 11 or more hours \_
- 6. For which language skills do you use IWB technology most?

Writing \_ Speaking \_ Reading \_ Grammar \_ Integrated Skills \_

#### **Section II: General Attitudes**

For the following items, please circle the answers that best show your opinion.  $(\Box)$ 

- 1= Strongly disagree 2= Disagree 3= No idea 4= Agree 5= Strongly agree
- 1. Using IWB-based resources reduce the time I spend in writing. 1 2 3 4 5
- 2. When using IWBs in the classroom, I spend more time for the preparation of the lesson.
- 12345
- 3. I think using IWBs makes it easier to reach different sources and display them to the whole class immediately.
- 12345
- 4. IWBs are beneficial to be able to save and print the materials generated during the lesson.
- 12345
- 5. I can give more effective explanations with the use of IWBs. 1 2 3 4 5
- 6. With the help of using an IWB I can easily control the whole class. 1 2 3 4 5
- 7. I think IWBs can be a good supplement to support teaching in young learners' language classes. 1 2 3 4 5
- 8. Using IWBs makes me a more efficient teacher. 1 2 3 4 5
- 9. Using IWBs makes it easier for a teacher to review, re-explain, and summarize the subject.
- 12345
- 10. I like using IWB technology in my lessons. 1 2 3 4 5
- 11. I feel uncomfortable in front of my students while using IWB. 1 2 3 4 5
- 12. I have positive attitudes towards the use of IWBs in language instruction. 1 2 3 4 5
- 13. I have negative attitudes towards the use of IWBs in language classes. 1 2 3 4 5
- 14. I do not think my students are ready for this technology. 1 2 3 4 5
- 15. What I do in class with traditional methods is sufficient in teaching English. 1 2 3 4 5
- 16. I am not the type to do well with IWB-based applications. 1 2 3 4 5
- 17. I think IWBs make learning more enjoyable and more interesting. 1 2 3 4 5

- 18. I believe that training is required to teach with IWB technology in young learners' language classes. 1 2 3 4 5
- 19. If I do not get sufficient training, I do not feel comfortable with using IWBs in classrooms.
- 12345
- 20. I can use IWB in my classes effectively 1 2 3 4 5
- 21. I can keep my students' attention longer with the help of IWB technology.
- 12345
- 22. I think IWBs increase the interaction and participation of the students.
- 12345
- 23. I think my students are more motivated when I use an IWB in my lessons.
- 12345

# Section III: Additional ideas and suggestions

1. Is there any other comment you would like to add about the use of IWBs:
2. Any problem or suggestion about the use of IWBs pre-during- and after the class:
Pre:
During:
After:

# Thank you

# **B:** Interview Questions for the Teachers

- 1. What do you feel about your competence in using IWB in EFL classes with young learners?
- 2. Do your administrators support you about improving yourself in IWB use?
  - a. How or how it should be?
- 3. Do you think it is necessary to use IWB in young learners' EFL classes? Why/why not?

# C: Checklist for IWB Use in Young Learners' EFL Classes

- 1. Teachers or student (T/S) highlights a text or parts of a text with different colors.
- 2. T/S can use his/her finger to draw or highlight something on the IWB screen.
- 3. T/S searches for something on the Internet. ...
- 4. T uses a subject specific software program during the lesson.
- 5. T/S hides and reveals a text or a part of a text or image.
- 6. T/S uses drag and drop function of the IWB.
- 7. T/S plays audio and video files.
- 8. T/S writes on the board using a stylus pen.
- 9. T/S saves written pages by clicking on the next icon.
- 10. T/S prints out the students' work and distributes them to the whole class.
- 11. T/S uses scanner to display the students' written product on the IWB.
- 12. T/S uses a wireless keyboard for writing on the board.
- 13. Ss have special hand-held tools for voting right or wrong answers in a test or exercise.
- 14. T navigates the texts and images from the board screen, not from the desktop or laptop computer.
- 15. T/S edits a student's written work on the board underlying, highlighting, or erasing.
- 16. Other uses.
- 17. Problems
- a) Board is difficult to see due to sun light
- b) Computer breaks down or jams
- c) Teacher is not confident in using the IWB

# **CURRICULUM VITA**

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# **EDUCATION**

Degree	Institution	Year of Graduation
MA	Bahçeşehir University	2016
BS	Marmara University	2011
High School	Anatolian Teacher High School	2007

# **WORK EXPERIENCE**

Year	Place	Enrollment
2010	Albany / New York	Saleslady
2011 - 2013	Bahçesehir College	English Language Teacher
2013	Bilfen College	English Language Teacher
2014	Theatre Fil	English Playwright

# **FOREIGN LANGUAGES**

Advanced English, Beginner German

# **HOBBIES**

Theatre, Photography, Swimming, Camping.