T.C.

Mersin Üniversitesi

Eğitim Bilimleri Enstitüsü

İngiliz Dili Eğitimi Ana Bilim Dalı

THE USE OF TECHNOLOGY INTEGRATED LANGUAGE LEARNING STRATEGIES (STILLS): PRIMARY SCHOOL STUDENTS

YÜKSEK LİSANS TEZİ

Sinem GÜNGÖR

Mersin, 2013

T.C.
Mersin Üniversitesi
Eğitim Bilimleri Enstitüsü
İngiliz Dili Eğitimi Ana Bilim Dalı

THE USE OF TECHNOLOGY INTEGRATED LANGUAGE LEARNING STRATEGIES (STILLS): PRIMARY SCHOOL STUDENTS

YÜKSEK LİSANS TEZİ

Sinem GÜNGÖR

Danışman
Yrd.Doç. Dr. Şaziye YAMAN

Mersin, 2013

Eğitim Bilimleri Enstitü Müdürlüğü'ne,

Bu çalışma jürimiz tarafından Eğitim Bilimleri Anabilim Dalında YÜKSEK LİSANS TEZİ olarak kabul edilmiştir.

Başkan.....

Yrd. Doç. Dr. Şaziye YAMAN
(Danışman)

Üye.....

Yrd. Doç. Dr. Elçin ESMER

Üye.....

Yrd. Doç. Dr. Yusuf İNANDI

Onay
Yukarıdaki imzaların, adı geçen öğretim elemanlarına ait olduklarını onaylarım.

21/02/2013

Prof. Dr. Yüksel KELEŞ
Enstitü Müdürü

ACKNOWLEDGEMENTS

Finally reaching the end of the story with different feelings; happiness, weariness, dreams, ambitions, be all in and resistance, upstanding and putting my best forward for this thesis. This dissertation would not have been possible without the guidance and the help of several individuals who became my sunshine and rain, who provided clear paths to follow, who faithfully supported me, and who waited ever so patiently for the fruits and who in one way or another contributed and extended their valuable assistance in the preparation and completion of this study.

First and foremost, my deepest sense of gratitude to my supervisor Asst. Prof. Dr. Şaziye Yaman, head of English Language Teaching Department who helped me at every stage of my personal and academic life, gave me unfailing support, inspirational immense knowledge, meticulous work and patience in spite of her very busy schedule. I could not be prouder of my academic roots without her guidance and hope that I can pass them to the others one day.

I wish to express my deep sense of appreciation to the committee members, Asst. Prof. Dr. Yusuf İnandı and Asst. Prof. Dr. Elçin Esmer for their encouragement and constructive feedback on my thesis. I am also so thankful to Asst. Prof. Dr. Yusuf İnandı who provided wisdom, patience, practical but golden suggestions and encouragement with his finite knowledge about evaluation and assessment. I am also very thankful to Sakine Göçer who taught me how to make analysis and taught to fish and feed me him for a lifetime.

I would like to thank to my sidekicks; Gökçe Esen, Meryem Özdemir, Sibel Sert, and Nurdan Armutcu for their precious suggestions, contributions and especially hearty and always supportive friendship. They were unforgettable characters of my story and will ne be forgotten in this long story of my life.

My special thanks are also extended to my colleagues from TED Mersin College (too many to list here but you know who you are!) who supported me with the load time of lesson schedules, helped for collecting data from several schools, for their positiveness, “never give up” suggestions and friendship that I needed. My research would not have been possible without their helps.

My insightful parents Zehra-Hasan Derkuş have sacrificed their lives for my sister and myself and provided unconditional love and care. I love them so much, and I would not have made it this far without them. My special thanks to my breath of life, my sister Seden Derkuş, who always walked with me every step of the way and who always made me feel confident in my ability to complete the research and dissertation. My sister has been my best friend all my life and I love her dearly and thank her for all her advice and support.

Last but not the least, I would like to thank the newest addition of our family; my new husband Enis Güngör, who was always there cheering me up and stood by me through the good times and bad, non-judgmental of me, a true and great supporter as well as his wonderful family who all have been supportive and caring. He has faith in me and my intellect even when I felt like digging hole and crawling into one. These several years have passed by leaving trace of many life experiences both academically and personally so now it’s time to live life to the fullest.

ÖZET

TEKNOLOJİ TABANLI DİL ÖĞRENME STRATEJİLERİ KULLANIMI: İLKÖĞRETİM OKULU ÖĞRENCİLERİ

SİNEM GÜNGÖR

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı

Danışman: Yrd. Doç. Dr. Şaziye YAMAN

Ocak, 2013

"Dil Öğrenme Stratejileri" ve "Teknoloji Tabanlı Dil Öğrenimi" alanlarında ayrı ayrı olarak birçok çalışma bulunması rağmen, bu ikisinin birleşimi ile son zamanlarda ortaya çıkan "Teknoloji Tabanlı Dil Öğrenme Stratejileri" (TTDÖS) kavramı keşfedilecek yeni bir alan oluşturmuştur. Bu nedenle, bu çalışma iki temel amaç üzerine kurulmuştur; (1) ilköğretim öğrencilerinin TTDÖS kullanım sıklıklarını belirlemek amacıyla "Teknoloji Tabanlı Dil Öğrenme Stratejileri Ölçeği" geliştirmek (2) İngilizceyi yabancı dil olarak öğrenmekte olan Türkiye'deki ilköğretim öğrencilerinin TTDÖS kullanım sıklıklarının belirli değişkenler (cinsiyet, okul türü, sınıf, kademe) açısından farklılık bulunup bulunmadığını ortaya çıkarmaktır. Çalışma örneklemi üç katılımcı gruptan oluşmuştur; ön hazırlık sürecinde madde yazımı amacıyla 97 kişilik bir grup, güvenilir bir TTDÖS ölçeği geliştirebilmek amacıyla uygulanan 448 kişilik bir grup ve geliştirilen ölçeğin geçerliğini sınamak ve il profilini

çıkarmak üzere Mersin ili 4 ayrı ilçesinden 2050 ‘si kız 1644’ü erkek olmak üzere toplam 3694 gönüllü ilköğretim öğrencileri grubundan oluşmuştur. Veri toplama aracı, araştırmacılar tarafından geliştirilen ve her boyutunda yüksek bir yapı geçerliği olduğu bulunan “Teknoloji Tabanlı Dil Öğrenme Stratejileri Ölçeği”dir. Farklı katılımcı gruplarından elde edilen veriler; faktör analizi, betimsel istatistik analizi, bağımsız gruplar için t-testi ve One-way Anova ile analiz edilmiştir. Genel olarak, TTDÖS ölçeğinin farklı boyutları açısından tüm değişkenlerinin anlamlı bir farklılık gösterdiği saptanmıştır. Sonuç, cinsiyet değişkeni açısından kız ve erkek öğrenciler arasında bir farklılık bulunduğunu ortaya koymuştur. Çalışmada erkek öğrencilerin “Oyunlar” ve “Internet ve Video” boyutlarında daha fazla TTDÖS başvurduklarını göstermiştir. Ayrıca, analiz edilen veriler devlet okulları ve özel okullar değişkenlerinin, tüm boyutlar açısından kayda değer bir farklılık bulunduğunu göstermiştir. Çarpıcı bir biçimde, sosyal yaşam dışındaki tüm boyutlarda TTDÖS’nin devlet okul öğrencileri tarafından daha fazla kullanıldığı ortaya çıkmıştır. Bunun yanı sıra, beklendiği üzere, kademe bakımından da anlamlı bir fark bulunmuştur. Elde edilen veriler 2. kademe öğrencilerinin (ortaokul) 1.kademe (ilköğretim) öğrencilerinden “Sosyal Yaşam” ve “Oyunlar” boyutlarında daha fazla TTDÖS’ne başvurduklarını göstermiştir. Son olarak sınıf değişkeni incelendiğinde ise yine “İnternet ve Video”, “Sosyal Yaşam” ve “Oyunlar” boyutlarında anlamlı bir fark bulunmuştur. Elde edilen tüm bulgular olası nedenler ve yapılan çalışmalar ışığında ölçeğin her bir boyutu açısından ele alınarak tartışılmış ve desteklenmiştir.

Anahtar Kelimeler: Dil Öğrenme Stratejileri (DÖS), Teknoloji Tabanlı Dil Öğrenme Stratejileri (TTDÖS), Teknoloji Tabanlı Dil Öğrenme Stratejileri Ölçeği, güvenirlik ve geçerlik

ABSTRACT

THE USE OF TECHNOLOGY INTEGRATED LANGUAGE LEARNING STRATEGIES (STILLS): PRIMARY SCHOOL STUDENTS

SİNEM GÜNGÖR

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Anabilim Dalı

Danışman: Yrd. Doç. Dr. Şaziye YAMAN

Ocak, 2013

Even though there have been several studies in the field of Language Learning Strategies and Technology Integrated Learning, the integration of two fields with a recent concept "Technology Integrated Language Learning Strategies" (TILLS) is a new area to be discovered. Thus, the present study has been built on two basic goals: (1) to develop a Scale of Technology Integrated Language Learning Strategies (STILLS) for primary school students in order to clarify the usage level of TILLS, (2) to find out whether there is a meaningful difference of Turkish EFL primary school students' TILLS usage level according to some variables (sex, school type, grade and level). The study has been built on three groups of participants; a group of 97 primary students for item writing in the preliminary preparation; a group of 448 primary students for developing a reliable scale of TILLS, and a group of 3694 (2050 girls and 1644 boys) voluntary primary school students from four districts and different levels to reveal the

validity and the level of the STILLS use. The data collected through STILLS developed by the researchers and each component is found to have a highly acceptable internal consistency. Data collection was carried through factor analysis, descriptive statistics, independent samples T-test and One-way Anova in the present study. In general sense of STILLS, a statistically significant difference has been designated for all variables in terms of different components. The results revealed that there is a significant difference between female and male students. Males in the present study emerged to be higher in the usage TILLS in the dimension of "Games" and "the Internet and Video". Besides, the data resulted with a noteworthy difference between state and private school for all components. Interestingly, except from the level of use in the social life, state schools indicated higher use of TILLS than the private schools. Furthermore, as it is expected, there has been a statistically meaningful difference in the level variable. The obtained data demonstrated that secondary school students use more TILLS than the primary students in two dimensions; "Social life" and "Games". For the last variable – grade-, there are also statistically meaningful differences in students' level of TILLS use in the aspects of three components; Internet and Video, Social Life and Games. All results have been discussed with the relation of each component in language learning and supported with the possible underlying reasons in the light of the literature.

Keywords: Language Learning Strategies (LLS), Technology Integrated Language Learning Strategies (TILLS), Scale of Technology Integrated Language Learning Strategies (STILLS), reliability of STILLS, validity of STILLS

CONTENTS

LIST OF APPENDICES

LIST OF ABBREVIATIONS (In Alphabetical order)

ALM: audio-lingual method

CAI: Computer Assisted Instruction

CEF: Common European Framework

df: degree of freedom

EFL: English as a Foreign Language

ELT: English Language Teaching

ESL: English as a Second Language

f: frequency

FL: Foreign Language

GLL: Good Language Learners

GTM: Grammar Translation Method

ICT: Information and Communication Technology

IBLI: Internet-based language instruction

LAN: Local Area Network

LLS: Language Learning Strategies

LS: Learning Strategies

L1: First Language

L2: Second Language

M: Mean

N: Number of the Students in the Sample

n: Number in sub-sample

p: Degree of Significance

SILL: Strategy Inventory for Language Learning

STILLS: Scale of Technology Integrated Language Learning Strategies

SD/S: Standard Deviation

se: Standard error

ss: sum of squares

t: t-value

TBL: Technology Based Learning

TILLS: Technology Integrated Language Learning Strategies

TILLSQ: Technology Integrated Language Learning Strategies Questionnaire

X: Arithmetic Mean

χ2: Chi-square test value

LIST of TABLES

INTRODUCTION

From the beginning of human history to the late 1800s, schools were the only source of information, and attending to them was the only way to acquire information. Hence; teachers were the only bridge to reach the knowledge. For centuries, students gathered information with a simple pen and a piece of paper, and/ or a board. However, thanks to the emerging technologies, those eras have been passed and educational tools and technologies changed a lot. Today, traditional resources have turned into myriad digital sources which offer more interesting, diverse and authentic materials in most of the institutions so, in the present anybody can reach the information without too much effort thanks to the emerging technologies.

The changes in the educational tools also have altered the educational atmosphere in the classroom, too. The use of technology in learning and teaching English as a foreign language (EFL) started with films, radios, televisions, language laboratories, videos, and computers after the 1980s (Cunningham, 1998). The growth of the Internet in the 1990s insured expanded classroom technology. Over time, the Internet became a platform of source for not only text-based information but also audio and video material. Its educational content reached to a point that the Internet itself has become a virtual classroom that consists of resources for different learning needs and strategies.

National Education Technology Standards (NETS, 2010) in U.S. has directed this development since 1998 in order to improve teaching and learning for educators. Similarly, the International Society for Technology in Education (ISTE, 2007) has established technology standards for students, teachers and administrators in K-12 classrooms. For instance; there are 5 main standards for

teachers under the title of Facilitate and Inspire Student Learning and Creativity, Design and Develop Digital-Age Learning Experiences and Assessments, Model Digital-Age Work and Learning, Promote and Model Digital Citizenship and Responsibility and finally Engage in Professional Growth and Leadership. Besides, according to ISTE, there are specific standards for all school administrators as well as students. The standards mentioned are a national consensus among educational stakeholders regarding the appropriate use of technology in schoolsin which teachers apply and students achieve success in learning, communication, and life skills (ISTE, 2008). So, these standards are used by teachers, students, and administrators to measure competencies and performances in the use of technology. Moreover; these standards set higher goals in attempt to make teachers, students and administrators skillful in terms of their use of technology. In Turkish educational setting, the Turkish Government introduced a series of funding initiatives to promote the use of information technology in schoolswhich began in 1982 and since that time applying technology to effective learning and teaching environment has been a key point in the current Turkish education policy (Asan, 2003).

Considering the developments in education, education is not limited within a school building anymore as students have the chance to attend virtual classes in distance from different cities or even from different countries. This has given students the opportunity to reach more goals in terms of accessing to information outside the classroom, as well. Furthermore, the innovation of digital, social and mobile technologies has created a culture in which students participate more which changes the way of how students communicate, interact and learn.

However, the changes mentioned above in the field of education are not limited with the learners; instead it is more apparent specifically in the classroom atmosphere. Teachers have gone from the blackboard to the overhead projector,

whiteboards then to smart boards, and recently from the slides to the use of iPads and tablets.

In addition, as a result of the rapid development in technology, education system, learners' profile, and learning atmosphere,the change in the views of teachers and trainers is inevitable and a natural reason of them. Teachers around the world have realized the positive benefits of technology. Therefore, they have tried to integrate blogs, wikis, social network sites etc. in their daily lesson plans and even into their national curriculum. For example, in 2010, U.S. National Technology Education Plan, *Transforming American Education: Learning Powered by Technology*through US National Education Plan, the U.S. Department of Education calls for "applying the advanced technologies used in our daily personal and professional lives to our entire education system to improve student learning" (2010, p.7).

All progresses mentioned above thanks to technology have brought new approaches into language development. As Social Policy Research report indicates, one of these new approaches is Technology Based Learning (TBL) which constitutes learning via electronic technology, including the Internet, intranets, satellite broadcasts, audio and video conferencing, bulletin boards, chat rooms, webcasts, and CD-ROM. These new technologies also offer new learning strategies for students who do not perform as well as expected by using traditional methods.

Technology-based Learning (TBL) in the early 21st century is transforming the way people learn at a time. Thus, it can be concluded that TBL emerged in the early 21st century has transformed the way how students learn. It is obvious that the learning style of students is variable as they may learn in audial and visual way through reflecting and acting; connecting, reasoning logically and intuitively; experiencing, involving into process, and visualizing.

Therefore, considering these various ways, teaching methods should vary according to learners' needs and learning styles. Along with the learning differences, the strategies that students apply are different from each other. However, the strategies explained were all based on the traditional class, teacher and learner; but, as far as reviewed, the strategies of learners determined by the researchers in literature are limited with the presence of technology in the educational setting which need a novice view towards the strategies used in the classroom.

Learning strategy is defined as "the special ways of processing information that enhance comprehension, learning or retention of the information" by Oxford (1990). Learning strategies enable students to become more independent, autonomous, self regulated, self managed learners by enhancing learning, solving problems, performing and making learning easier and faster (Cohen & Macaro, 2007). Specifically, in learning context, LLS are among the main factors that help determine how and how well our students learn a second or foreign language (Oxford, 1996). Additionally, the types of language learning strategies used by different learners alter according to many variables such as; sex (Politzer & McGroarty, 1985), age (Tyacke & Mendelsohn, 1986), level of L2 (Huang & Van Naerrsen, 1987), and cultural background.

As a result of the developments in cognitive psychology, there are many researches done on language learning strategies (Naiman, Frohlich, & Stern, 1975; Rubin, 1981; Wenden, 1982; Politzer, 1983; Oxford, 1985; O'Malley, Chamot, Stewner-Manzanares, Russo & Kupper, 1985; Chesterfield & Chesterfield, 1985; Chaudron, 1988; Oxford, & Nyikos, 1989; Skehan, 1989; Ellis 1994; Oxford, 1994; Oxford, & Burry-Stock, 1995; Lessard-Clouston, 1997; Cohen, 1998). Because, cognitive approaches to communicative language teaching are based on the view that learning a language is an individual

psycholinguistic act. From this perspective, language learners construct a mental model of a language system, based not on one habit formation but rather on innate cognitive knowledge in interaction with comprehensible, meaningful language (Chomsky, 1986). Particularly, developments in cognitive psychology influenced much of the research done on language learning strategies (LLS) (Wiliams & Burden 1997). So, in the cognitive process, one of the crucial elements that make the students unique is the strategies they employ in their learning. When confronted with a learning task, learners make use of these strategies in unique ways; hence the strategies used by the learners alter depending on the learners' individuality. According to Oxford, LLS "are especially important for language learning because they are tools for active, self directed involvement which is essential for developing communicative competence" (1990, p. 28).

In the 1980s and 1990s, with a focus on meeting the cognitive needs of second language learners pedagogical practises in second language learning and teaching became widely accepted. Based on this view, technology, language, and pedagogy evolved in parallel directions, because technologies allow learners supreme opportunity to interact within meaningful assorted contexts. Furthermore, from the social perspective, socio-cognitive approaches, in contrast to cognitive approaches, emphasize the social aspect of learning a language is viewed as a process of apprenticeship or socialization into particular discourse communities (Schieffelin & Ochs, 1986). Hence, technology is powerful tool enabling not only to participate in a range of contexts, and maximize authenticity but also to provide an interactive environment for language learning.

In Turkey within the Fatih Project, the Turkish Ministry of National Education delivers tablet computers to students in 17 different provinces, which is the most significant aspect of the Project. By this Project 300 years of

backwardness are hoped to be buried in history. The education system is tried to be shaped by considering all the potential hitches.

As a general landscape of English education system in Turkey, English is compulsory beginning from the 4th grade. So hopefully, they will be able to compete with the rest of the world by integrating technology in education. The tablet computer systems will be integrated into the new smart boards which will also be distributed to state schools throughout the nation. In addition, teachers have also been given tablet computers, providing them the capability to track whether students are following the class in progress. Even some parts of the lessons are transferred to tablets such as practicing subjects, homework, feedback, exams and evaluations etc.

From a theoretical point of view, a myriad of theories contribute to the use of technology in education. Language theories; behaviorist, cognitive and socio-cognitive approaches, second language acquisition theory, foreign language teaching theories, social constructivism as a learning theory, autonomous learning and blended learning models are just some of them underlying the concept. All of these learning theories hold the notion that they arepedagogically mediums for meaningful learning atmosphere.

While English Language Learning and Teaching has already been a very popular subject on its own, when it is hand in hand with technology it has made a breakthrough. This recent explosion in technology leads to a change, and reshaping of both the teaching and learning phenomena. Growing up in digital age is affecting today's students in numerous ways, all of which have changed the learning preferences. Traditional face to face learning is gradually losing its importance as the individual differences and uniqueness gain importance. Changing shape of learning strategies from paper pen style to the technological environment increase the importance given to the TBL. Therefore, the emergence

of new technologies pushes educators to leverage these technologies for classroom use and making the learners construct their own learning.

Since the introduction of computer technology in the late 1970s, much of the literature on the uses of computers in schools has concentrated on instructional applications in the classroom. In Turkey and other countries, a great deal of studies (Kay & Lauricella**,** 2011; Arend, 2004; Lindorth & Bergquist, 2010; Skolnik & Puzo, 2008; Barak et al.; Mackinnon & Vibert, 2002; Weaver & Nilson, 2005) has demonstrated the benefits of technology in the field of education. Many studies examining the effectiveness of technology integration in education have demonstrated that within technology integrated environments, language learners display lower levels of anxiety (Beauvois, 1992; Kelm, 1992), they participate more (Kelm, 1992; Kern, 1995; Sullivan & Pratt, 1996) there is more peertopeer interaction (Erben, 1999; Kern, 1995), and that students produce more language (Beauvois, 1992; Kelm, 1992; Kern, 1995). When learning takes place, language learners also generate more types of sentence structures and more discourse functions (Chun, 1994; Kern, 1995), they use more lexically and syntactically complex language and discourse strategies (Warschauer, 1996), they develop a greater cultural awareness (Jin, 2004; Warschauer, 1997), there is more equalized participation among students (Kelm,1992; Sullivan & Pratt, 1996; Warschauer, 1996), students have a greater sense of errors (Salaberry, 1996), as well as develop increasingly target-like writing styles (Davis & Thiede, 2000) (as cited in Ban, Jin, Summers & Eisenhower, 2007).

Also there are many other studies which have been conducted to describe the technology profiles of schools (Saban, 2007), web literacy, computer literacy (Herczeg & Kindsmüller, 2008), media literacy of teacher and learners (Bektaş, 2009). Additionally, their readiness (Summak, 2010), beliefs (Yang & Huang, 2008), attitudes and perceptions are used with many scales. Many scientists

believed that technology's role in education has increased gradually since 1970s, and recently it has become an indispensable tool of English Language Education.

Due to the changes in the language teaching and learning field, more and more researchers noted if language learners have changed their language learning strategies for online English learning environment. Individual differences postulate different strategies as technology becomes incorporated into classrooms and curricula. But still the strategies that learners apply while using technology have not been defined. Technology has been changing the way of how language is learnt. Considering the individual differences, each individual learner has his/ her own strategy to learn language; nevertheless, there is no knowledge in literature, as far as reviewed, about which strategies are used in EFL classrooms when technology is integrated. The present study aims to focus on this lacking side of educational technology in the field of language teaching.

Problem Statement

Many studies have been conducted on Language Learning Strategies (LLS) up until today. However, with the rapid developments in technology, learning strategies used by individuals started to change. A shift from the Oxford strategies towards the Technology Integrated Language Learning Strategies (TILLS) is a new phenomenon. Since this is a recent development, there are only a limited number of studies on Technology Integrated Language Learning Strategies. Several questions on this topic arise as people get more and more interested; thus it requires further thought and analysis. In this thesis, the aim is to be able to explore Technology Integrated Language Learning Strategies in more detail to clarify some of the questions and vague points.

In spite of all the studies mentioned above on technology, not many researchers conducted studies to find out how to integrate technology into their education. Still the potential of technolohgy is a new phenomenon in Turkey, and it needs to be noted that education is not as far along as other diligence in the use of technology. Studies related to technology so far have been merely conducted with high school and university students, and could explain the use of strategies in traditional learning model. Yet, with the compulsory ICT lessons proposed by the Ministry of National Education, primary school students are engaged in technology, more often than the others, emphasizing the active and independent learning, and becoming more of an issue for individual strategies.

Therefore, a new scale to be able to describe and measure the new generation primary students' level of language learning strategies' use via technology is inevitable. Besides, discussing the level use of TILLS in the light of some variables will enlighten the darkness of the literature, and will bring new dimensions of English Language Teaching (ELT).

The Aim and Significance of the Study

For different purposes and with the indispensable changes in the 21st century, language learning goes beyond the boards and classes in the technology era. So, the needs integrated with technology has altered and gained importance. According to the reviewed literature there seems to exist no research on investigation of TILLS, and unlike the studies conducted to date. Infact, this is a very recent concept which has started to be more common day by day. In this respect, this study might be considered as unique. As a general layout, the current study is going to be guided by two main research aims in regard to some variables. Firstly, the main purpose is to be able to develop a scale of technology

integrated language learning strategies (STILLS) for primary school students. By this scale, the main aim is to clarify the level of Technology Integrated Language Learning Strategies used by primary school students grading from 4^{th} to 8^{th} classes. Secondly, seeking if there is a meaningful difference in the TILLS level of use according to certain variables such as sex, school type, level and grade is another aim of the present study.

Nowadays in a situation in which education is not only given under the roof of schools but also continues even after schools in everyday life, taking into consideration the individual differences in measuring the technology integrated language learning strategies will guide the development of more efficient and active learning.

As a new phenomenon, the use of strategies in language learning through technology will be discussed critically considering specifically Turkish language learners. In other words, this study considers cultural background of Turkish primary students in terms of TILLS. In this way, a prominent contribution is supposed to be provided analyzing different students from different backgrounds and school environments, and defining the technology potentials of schools for the literature. Furthermore; with the developed STILLS, other researchers are hoped to make good use of Turkish students' language strategies via technology through a valid and reliable tool. It may also be possible to reconstruct the technological tools and softwares used in English language learning and teaching constituting baseline data and a basis for future research on technology integration.

Research Questions

The following research questions are the basis of the study:

1. What is the level of Turkish EFL primary school students "Technology Integrated Language Learning Strategies" use?
    1.1. What is the level of Turkish EFL primary school students of "TILLS" use via the Internet and videos?
    1.2. What is the level of Turkish EFL primary school students of "TILLS" use in the social life?
    1.3. What is the level of Turkish EFL primary school students of "TILLS" use in games?
    1.4. What is the level of Turkish EFL primary school students of "TILLS" use in the projects and assignments?
2. Is there a meaningful difference of Turkish EFL primary school students' level of "Technology Integrated Language Learning Strategies" (TILLS) use according to some variables?
    2.1. Does the level of Primary School Turkish EFL students "TILLS" use differ according to sex?
    2.2. Does the level of Primary School Turkish EFL students "TILLS" use differ according to the school type?
    2.3. Does the level of Primary School Turkish EFL students "TILLS" use differ according to level?
    2.4. Does the level of Primary School Turkish EFL students "TILLS" use differ according to grade?

The research questions above based on the purpose of the study seek to find answers to the main concerns of the present study. The developed "Technology Integrated Language Learning Strategies" (STILLS) scale has been developed with the aim of answering the sub-research problem of the study.

The present study consists of three chapters: Chapter I provides a review of the literature. Chapter II describes the methodology used in the development of the 5 points likert type TILLS scale and the sub-research questions related to the reliability and validity of the scale. Finally, the conclusion of the study with discussion is presented adding some implications and suggestions for further studies.

Definitions of Terms (In Alphabetical order)

Asynchorous learning: The teaching takes place at one time and is preserved for the learner to participate whenever the time is most convenient for him or her. Technology such as email, e-courses, online forums, audio and video recordings make this possible (Hrastinski,2008)

Cognitive Strategy: One that involves mental manipulation or transformation of materials or tasks and is intended to enhance comprehension, acquisition, or retention (O'Malley & Chamot, 1990, p. 229).

Distance learning: A term for the physical seperation of teachers and learners that has become popular in recent years particularly in the United States.While used interchangeably with distance education, distance learning puts the emphasis on the "learner" and is especially appropriate when students take on greaterresponsibility for their learning as is frequently the case when doing so from a distance (Picciano, 2002, p.328).

E-learning: This termincludes all forms of electronically supported learning and teaching. The term is still most likely be utilized to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum.

Internet-based language instruction (IBLI): It can be defined as language teaching conducted on the Internet tools and resources (Son, 2004).

Information and Communication Technology (ICT) refers to technologies and tools that people use to share, distribute, and gather information, and to communicate with one another through the use of computers and interconnected computer networks (Albirini, 2004). It can be broadly defined as the set of technologies that enable the collection, storage, processing, and automatic transfer of information, as well as the ability to access this information remotely

by means of electronic, optical, and/or other technologies (Yurdakul & Çaglayan, 1997).

Integrated Learning (IL): The term *integrated learning* in the present study is usedas an umbrella term encompassing all aspects of the student learning experience.*Integrated learning* is used to reflect how pedagogy, curriculum, learning resources and environments work together in a seamless and integrated way to be responsive to student expectations and new developments in technology.

Language Learning Strategies: Specific actions, procedures, or techniques used by learners to facilitate their own learning, and make learning process easier, faster, more enjoyable, and more self-directed (Richards & Lockhart, 1994).

Metacognitive Strategy: A learning strategy that involves thinking about or knowledge of the learning process, planning for learning, monitoring learning while it is taking place, or self-evaluation of learning after the task has been completed (O'Malley & Chamot, 1990, p. 230).

Synchronous learning: It takes place when two or more people are communicating in real time. Sitting in a classroom, talking on the telephone, chatting via instant messaging are examples of synchronous communication (Hrastinski, 2008).

Social-Affective Strategy: One of three general types of learning strategy. It may consist of using social interactions to assist in the comprehension, learning, or retention of information. It may also consist of using mental control over personal affect that interferes with learning. (O'Malley & Chamot, 1990, p. 232).

Strategy: Specific actions, techniques, or procedures which language learners use consciously or unconsciously, in learning, thinking etc… (Longman Dictionary of Applied Linguistics, 1985).

Technology Based Strategies: Social Policy Research report, *"Technology-based learning" (TBL) is*the widely accepted term as the learning of content via all electronic technology, including the Internet, intranets, satellite broadcasts, audio and video tape, video and audio conferencing, Internet conferencing, chat rooms, e-bulletin boards, webcasts and computer-based instruction (2006).

CHAPTER I: REVIEW OF LITERATURE

In retrospect, the arrival of Language Learner Strategies (LLS) research formed a fundamental shift for perspective thinking about the process of language learning. Until the 1970s, language learning was seen as a psychological phenomenon. Behaviourist theories questioned this phenomenon individually and found out the practice of phrasal drilling, learning through repetitions and stimulus-response all manipulate individual habit. Then the word "strategy" gained increasing prominence as a concept in second language learning. Further conceptual and theoretical developments led to focus on defining this term and classifying it.

I.1. Identification of Language Learning Strategies

The shift from language teaching strategies to language learning strategies (LLS) in the last decades accelerated the educators and researchers in the area of language education aimed to study on learning strategies (Lessard-Clouston, 1997). In many studies, the variables that affect personal properties of the learners were searched in details. Although many distinctions have been made between different types of learning strategies, to date, there is no consensus as to which strategies are used by English as foreign language learners (EFL). When confronted with a learning task, learners make use of them in different unique ways hence the strategies used by the learners alter depending on the learners' individuality.

The term "learning strategies" has a number of definitions used by key figures. In a broad term, learning strategies are a serious of skills operating at the

executive learning process which manage and co-ordinate the skills. In other words, they are like the tactics used by a player which is purposeful and goal-oriented (Williams & Burden, 1997). Grenfel and Harris (1996 in Lessard-Clousten 1997) define language learning strategies as, special thoughts or actions that learners use to help them comprehend, learn or retain new information. In their seminal study, O'Malley and Chamot (1990) defined LLS as "the special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information" (p. 1). On the other hand, Oxford (1990) who is known as the pioneer of the field defines learning strategies as steps taken by learners to enhance their own learning. At the same time, it should noted that LLS are distinct from learning styles, which refer more broadly to a learner's "natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills" (Reid, 1995, p. viii).

Considering the given definitions above, it can be clearly reported that emphasizing on the processes and characters of LLS gained more importance than products of linguistic and sociolinguistic competence (Lessard- Clousten, 1997). It is reviewed in literature that it is possible to encounter the notion “LLS” in different versions. The term “learning strategies" is originally used by Wendin and Rubin (1987), also O'Malley and Chamot (1990, 1994) used this term, whereas; Oxford (1990, 1996) used the term "LLS".

I.2. The Classification of Language Learner Strategies

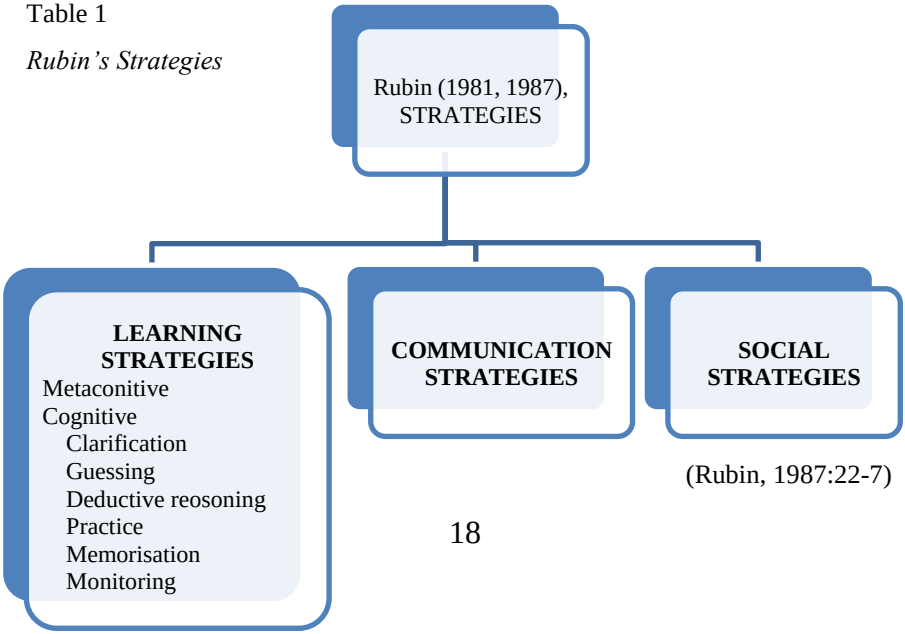
The impetus for the growing interest in cognitive strategies and thinking skills “how” learners go about learning something and learners’ use their personal attributes in the process of learning resulted from information processing models of learning (Williams & Burden, 1997).

Research into LLS began in the 1960s and good descriptive surveys of this field provided by many known researchers. One of the pioneer Joan Rubin, distinguish the strategiesthat contribute directly to learning such as memorizing, inducing rules, guessing meaning, rehearsal and that contribute indirectly to learning as seeking opportunities to speak to tourists, listening to the radio, writing to a pen friend (Williams & Burden, 1997).

Analyzing the literature, various classifications of LLS can be encountered which is another issue having been discussed for the last two decades. Many scholars tried to develop a classification schema for LLS. Rubin suggests a classification (see table 1). In Rubin's categorization (1981, 1987 as cited in Williams & Burden, 1997), three major types of strategies are used; *learning strategies* contributing directly or indirectly to language learning, *communication strategies* used by a learner to promote communication with others and *social strategies* activities that learners use in an attempt to increase their exposure to the language (p. 149-151).

Table 1

Rubin's Strategies



(Rubin, 1987:22-7)

This categorization and definition were further developed by Rebecca Oxford (1990, p. 9).The broadest categorization is outlined by Oxford (1990) in three main types of direct LLS, and three main subtitles of indirect LLS. "*Memory strategies*" used for storage of information, "*cognitive LLS*" are the mental models receiving and producing messages in the target language and lastly "*compensation strategies"* are needed to overcome any gaps in knowledge of the language (Oxford, 1990, p. 71) (see table 2). Oxford (1990) also defines three types of indirect LLS; "*metacognitive strategies*" help learners exercise 'executive control' through planning, arranging, focusing, and evaluating their own learning. *"affective strategies"* enable learners to control feelings, motivations and attitudes related to language learning. Finally, "*social strategies"* facilitate interaction with others, often in a discourse situation" (Oxford, 1990, p. 71).

Table 2

Diagram of the strategy system showing two classes, six groups and 19 sets

Direct Strategies	**Memory**	**Cognitive strategies**	**Compensation strategies**
	Creating mental linkages	Practising	Guessing intelligently
	Applying images and sounds	Receiving and sending messages	Overcoming limitations in speaking and writing
	Reviewing well	Analysing and reasoning	
	Employing action	Creating structure for input and output	

Indirect Strategies	Metacognitive strategies	Affective strategies	Social strategies
	Centering your learning	Lowering your anxiety	Asking questions
	Arranging and planning your learning	Encouraging yourself	Co-operating with others
	Evaluating your learning	Taking your emotional temperature	Empathising with others

(Oxford 1990, p. 17).

So far, LLS definitions, development and classification have been discussed deeply by many researchers (Chamot, 1987; Chamot & Kupper, 1989; Ellis 1986; Politzer & McGroarty, 1985; Rubin 1975; O'Malley & Chamot, 1990; Oxford, 1990; Tarone, 1981; Wenden, 1991). Having established future goals for conceptual, theoretical and methodological rigor, the LLS research is believed to be detailed according to Cohen, (2007). Thus with the educational movement to technology and opportunities of today's classrooms and educational system, discussions on integrated LLS with technology would be expressive and useful.

I.3. The Use of Technology in Education

The rapid and constantly changing landscape offer various opportunities and challenges for education. There are many reasons that may explain the question "what makes technology important for today's life and education". With the limitless changes in technology, now it is almost impossible for people to find a job that does not include technology in some way. Except from the necessity in the work area, the society makes it essential by using it in a way; communicating, and interacting with each other. These changes in a nation's point of view, give opportunity to the direct advances in technology and these advances make it urgent for using technology in the education, as well. These examples can explain the reason of the usage of technology in education. But in fact; technology usage has some slight positive benefits for the students in the foreign language classroom context in the light of historical experiences.

> A number of benefits for students related to the general use of technology in classrooms have been reported. These include motivation, improvement in self-concept and mastery of basic skills, more-student centered learning and engagement in the learning process and more active processing, resulting in high-order thinking skills and better recall. (Brownlee-Conyers, 1996; Dwyer, 1996; McGrath, 1998; Weiss, 1994 as cited in Stepp-Greanny, 2002, p. 165).

One of the important benefits of technology in education is to reach students of all learning styles as well as being more efficient. Apart from these,

computers can help develop important skills. The use of computers can help enhance information processing skills like the ability to locate information, distinguishing the important from unimportant, think critically, cooperation and collaboration. From the pedagogical aspects, as a motivational tool, technology positively impacts student attitudes toward learning, self-confidence and self-esteem (Ranasinghe & Leisher, 2009).

On the other hand, Jonassen (2000) explained the benefits of technology for promising smarter, better educated, and more fulfilled learners.Students can improve their skills more via the usage of technology in education. Many educators and researchers for example Mehlinger and Powers (2002) believe that the reasons for using technology seem so obvious. They acknowledged that everyone should recognize the benefits of technology based on two major beliefs: (1) "technology is everywhere and therefore should be in education" and (2) "research has shown now and where computer-based methods are effective".

According to Sanaoui and Lapkin (1992) technology encouraged the development of independent learning characteristics in high school students. Beauvois (1998) revealed that students participating in a Local Area Network (LAN) writing project showed positive attitudes about learning in that setting. She concluded that students felt positive because the LAN represented a low-anxiety situation and because they had more control than in a traditional classroom. Likewise, Warschauer (1996) identified three common factors of student motivation provided by a technology enhanced setting: communication, empowerment, and learning. Another study on for English writing skills via technology by Hartman et al. (1995) concluded that the use of technology redistributes teacher and classmate attentions so that less able students can become more active participants in the class (as cited in Stepp-Greanny, 2002).

On the other hand; the art of teaching in the classroom is likened by Knill (2007) to the skill of preparing a meal in a restaurant where the teacher is the cook and the students are the guests. The best efforts of teaching, the most skilful use of technology can be ruined by a tiny mishap. The best meal, using the best recipes can be spoiled by adding too much salt for example. In reality, the overuse of technology is also dangerous. Besides that, tasty things can still be unhealthy or complex ingredients can be hard to prepare, so the chef should be experienced. Likewise, teachers should be the one who choose or guide students- the guests- what to eat and how to eat.

To sum up, there are many benefits of technology usage in education and many researchers stated above supported the idea with many studies. Technological enhancements in education allow to spice up the lessons and help but at the same time, the pace and speed of changes in technology create a challenge for schools. Schools especially the private ones are trying to catch up the digital innovations such as computers, hand-held devices, smart boards, learning materials supporting 7/24 learning; but, unfortunately with the ones who fall behind they may create a digital divide based largely on educational technology. Similarly, there are also many studies that show the challenges in integrating technology in education. Some of them were discussed below in the light of reviewed literature.

One of them Dede (1997), tried to answer six questions to sketch a conceptual framework for thinking about the process of scaling-up from islands of innovation to widespread shifts in standard educational practices in his study. He also stated that technology-based systemic reform is hard in part because the ways of thinking about implementation are often flawed.

Likewise, Groff and Mouza (2008) discussed six central factors, each with its own critical variables, that interact with one another to produce barriers to

implementing technological innovations in the classroom: (a) Research & Policy factors, (b) District/School factors, (c) factors associated with the Teacher, (d) factors associated with the Technology-Enhanced Project, (e) factors associated with the Students, and (f) factors inherent to Technology itself.Besides, Ertmer (2005) pointed out one of the biggest challenges for teachers in terms of integrating technology into their classrooms. He stated that they seem to have a hard time finding the pedagogical fit of ICT in their teaching.

Today, young people are already learning a great deal in non-formal contexts, and it is possible to put the contents of a year's worth of textbooks into a tablet PC as The National Ministry of Education attempt via Fatih Project. Such authentic materials include, for instance, online newspapers, webcasts, podcasts, newsroom video clips or even video sharing websites like Youtube which support meaningful learning in authentic contexts (Kumar & Tammelin, 2008). The sum and the substance of technological opportunity are to open up the all world as a source of inspiration and explore the world beyond textbooks by empowering students. In conclusion, the key to successful use of technology in language teaching lies not in hardware or software but in "humanware" as teachers plan, design, and implement effective educational activity.

I.3.1. The Impacts of Technology on Foreign Language Teaching

Apart from the impacts on different lessons, technology is a very influential tool specifically in foreign language classes. There are many different tools of technology in language classes with the use of e-mail, chat rooms, Web cam, Web sites, web quests CD-ROM, and audio and video streaming. Technology helps connect multicultural education in a number of ways. Sleeter and Tettegah (2002) elucidated that it also helps learners with language

differences. These benefits are in spelling, grammar and punctuation errors, editing, revising and motivation. Technology has many advantages for all skills in foreign language teaching influencing the development of linguistic skills.

There have been reports of improvement in reading. In Beauvois' 1994 study, 43% of the students reported that reading skills had improved. Furthermore, in follow-up interviews in the Beauvois study (1994) many students expressed an increased confidence in speaking. Also the use of multimedia increases comprehension, develops oral skills and may have a positive effect on the learning of grammatical knowledge (Brett, 2000). Behrmann (1995) also stated about the various multimedia CD-ROM based programs for assisted reading and customizing instructional materials to meet the various disabilities. These tools are also available to help students develop and improve cognitive and problem-solving skills.

For writing skill to improve, technology has the potential to enable students to share their work with a wider authentic audience. Writing an e-mail, using a social media such as Facebook, Twitter, Youtube, Flickr, Myspace, Friendster etc. and also blogs which are open to other people help influence students writing skills. They also develop effective observation and reporting skills as well as being an excellent medium for global communication and collaboration (Smolin & Lawless, 2003). There are some specific websites for both students and teachers to communicate in a variety of languages, engage in specific group discussions and work on global collaborative projects such as e-pals.

For speaking skills, there are some studies investigating how technology could be used to promote speaking skills (Borrás, 1993; Coniam, 1998; Derwing, Munro & Carbonaro, 2000; González-Edfelt, 1990; Liaw, 1997). Liaw's (1997) identified a group of students using computer books and the conversations that

took place as they read them in his study. He also found out that asthe students became more prolific readers, their discussions shifted from dealing withtechnological difficulties to the content of the books. As the result of the study, he suggested computerbooks could provide the content on which discussions could evolve.

Lastly, for the effect of technology on listening skills, Brett (1997) examined theusefulness of multimedia technology over simple audio and video equipment in promotinglistening skills. He defined that multimedia may have an effective result on different learning styles. Merlet (2000) examined the effects of lexical and semantic previews on comprehending acomputerized illustrated dialog and found that semantic previews improved information recall. Recently, Ru-Si and Chin-Chung (2007) searched for 1.866 Taiwanese university students' attitudes toward learning via the web by using an online survey. The results indicated that the students had a positive attitude on the dimension of access to Internet technology for learning.

In the light of the reviewed literature mentioned above, students' reactions to technology integrated learning are highly positive andthe studies for evidence to link the use of technologies with academic performance (Carnoy, Daley & Loop, 1986; Taylor et al., 2007; Chandra & Lloyd, 2008; Underwood et al., 2008; U.S. Department of Education, 2009). Therefore, it can be understood that any means of technology has a significant impact on promoting different skills in foreign language and second language.

Based on the developed scale, TILLS strategies used by primary students have been defined under four dimensions in the current study: the Internet and video, games, social life, projects and assignments. The general layout of each aspect will addressed consistently with the reviewed literature below.

1.3.1.1. The Internet and Video

The Internet offers a wealth of information for both students and teachers in terms of foreign language resources. There are a large number of online tools that can be used for foreign language learning and teaching (Chapelle & Jamieson, 2008; Garrett, 2009; Godwin-Jones, 2009, 2010; Levy, 2009; Meskill & Anthony, 2010; Warschauer, 2010).

Today, people generally use the Internet as a part of daily life and social networks such as Facebook, Myspace, Youtube, Weblogs, Xanga, Friendster, Orkut, Bebo and Wiki.While developing their communicative abilities, they share their photos andvideos. Boyd (2003) remarked social networks as software products developed to make mutual interaction between individuals and groups easier and they provide various options for social feedback and support the establishment of social relationships.

Internet-based language instruction (IBLI) attracted great attention of educators as a newly phenomenon. Son (2011) in his study explains the importance of the Internet use and focus on the usage of it as a being trend topics for researchers with the examples from his own studies; online discussion groups (Son, 2002), the evaluation of language learning websites (Son, 2005) and Web-based portfolios (Son, 2009 as cited in Son, 2011).

On the other hand, since the 1970s and 1990s up till the present time (Berwald, 1985; Lonergan, 1984; Secules, Herron & Tomasello, 1992; Terrell, 1993; Yang, Chen & Jeng, 2010) videos have become widely available as a foreign language teaching resource. Videos notably offer a variety of stimuli for viewing comprehension; listening comprehension and reading comprehension, since the students have the opportunity to read visual as well listen toauditory messages at the same time. Due to the rapid development of media technology, large numbers of videos nowadays are stored in digital format. Unsurprisingly,

different kinds of digital media are available via the Internet and videos have been increasingly been used to serve the needs of EFL learners (Chen, Huang & Chu, 2005; Huang, Chen, Huang, Jeng & Kuo, 2008; Jeng, Wang & Huang, 2009).

A recent large-scale survey by Canning-Wilson (2000) reveals that the students like learning language through the use of video, which is often used to mean quite different things in language teaching. According to the study, students like video because video presentations are interesting, challenging, and stimulating to watch. Video shows them how people behave in the culture whose language they are learning by bringing a communicative situation into the classroom. Besides, the learner can concentrate on the language in detail and interpret what has been said, repeat it, predict the reply and so on. The learner can also concentrate in detail on visual clues to meaning such as facial expression, mime, gesture, and on details of the environment (Çakır, 2010).

Finally in the current study, the Internet and video aspects are given together since videos are also available in the Internet. Also it is possible to use videos via the educational tools, softwares and social media and networks in the Internet as well. Furthermore; the Internet and video may generally be the most commonly used technologic tools by students which signify the strategies applied in the educational framework.

1.3.1.2. Games

As the second dimension of the STILLS, games are fun activities that promote interaction, creativity, independence, higher thinking, learning, and problem solving strategies. The current study deals with especially K-12 students who are interested in playing games as a part of their hobbies and daily life. “The

learning process should be interesting, easy and it should be fun to learn. It should also fit with an everyday task and the working environment in order to achieve optimum results" (Pivec & Dziabenko, 2010, p.1). Games can insert a range of roles in language curriculums. Traditionally, games have been used in the language class as warm-up at the beginning of the lesson when there is extra time near the end of class.

There are numerous benefits of using games in foreign language learning. Games which are task-based and have a purpose beyond the production of correct speech serve as excellent communicative activities (Saricoban & Metin 2000). However, games can also constitute a more substantial part of language courses (Lee, 1979; Uberman, 1998). Students form their own meaning from their own experiences while learning from their mistakes as well as building upon their previous knowledge. Games make learning fun and relaxed (Nguyen & Khuat, 2003).

Games are also highly motivating and aid students to make and sustain the effort of learning. Another advantage of using games for the language class is that they encourage students to interact and communicate (Lee, 1995). In addition, language games can provide challenges to young minds and can be used to engage children in cooperative and team learning (Ersoz, 2000). Games also can reinforce learning through many of Gardner's multiple intelligences (1983). Since individuals receive and process information in very different ways, it is important that teachers utilize different strategies and styles. "Games enhance repetition, reinforcement, retention and transference" (El-Shamy 2001, p.10). Because each game has a specific learning objective in mind, each player's turn deals with the same concept or skill in a different way. Finally, games also provide a competitive element that enhances effective learning as they keep learners interested (Nguyen & Khuat, 2003)

1.3.1.3. Social Life

With the third component of STILSS, social life is referred to keeping a diary via "Word and notebook" which is available on the computer; discussing in blogs and forums, reading e-books and using cells for communicating. They are all technological tools for being able to apply real life situations. There are some studies that show the impact of technological enhancement on the social life concept described above.

Firstly, Bailey (1990) described a diary study as a first person account of a language learning experience. In fact, diary studies have been an important tool in language learning research since they can provide a different perspective of students' learning experiences and processes. Similarly, Corti (1993) identified three benefits of diaries over interviews: providing more reliable data for events which are difficult to recall accurately; overcoming problems of collecting sensitive data by personal interviews; creating rich and comprehensive information on participants' behaviours.

Next item is about participating in discussions in blogs and forums which are mentioned before in the Internet subtitle. Blackstone, Spiri and Naganuma (2008) reported an innovative approach to the implementation of a cycle of blogging activities within different levels of courses in English for academic purposes program in an English medium university in Japan. They also highlighted that the usefulness of blogs as interactive homepages that are easy to set up and manage. They denunciated blogs enable students to engage in online exchanges, expand their language study and learning community beyond the physical classroom, while encouraging more autonomous learning. Dieu (2004) reaffirms this by stating that blogging gives a learner the chance to "maximize focused exposure to language in new situations, peer collaboration, and contact with experts" (p. 26).

Similarly, Conhaim (2002) proposed that blogging can help learners develop confidence in their ability to learn. Confident intheir ability to communicate, students voluntarily refine their reading and writing andsuch improvement is boosted by successes in blog communications. Therefore, Ward (2004) encouraged students to blog and a post-course survey confirmed that students enjoyed the experience, even though they had no prior experience of webdesign. Oravec (2002) suggests that writing blogs encourages students to be analytical andcritical in severalways.

When it comes to using mobile technology in language educationsuch as cell phones, smart phones, iPones etc., they have a powerful function as computers. These devices are small, smart, portable, and comfortable to utilize so, students benefit from the use of wireless technologies as well since these technologies allow for mobile, video and data transfer much faster than the conventional mode of technologies. Among all the mobile devices, cell phones are probably the most popular and widely used all over the world, they have all the technologies in it; music, the Internet, thereby blogs, social networks, mails, texting, downloading, games etc.

Contrary to what is believed by most of the people, cell phones are not just communication devices, with the innovations they are also particularly useful computers that fit to your pocket and are always with you. For those reasons, like all communication and computing devices, cell phones, can be used to learn (Prensky, 2004).

1.3.1.4. Projects and Assignments

The fourth dimension of STILLS, projects and assignments are usually boring and dull parts of language learning. However; when they are integrated

into technology, as many some researchers suggest (Lowerison, Sclater, Schmid & Abrami, 2006) it becomes the focal point transforming the learning environment from passive to active and more subject to the control of the learner. According to Roblyer (2003), technology may enable the learners to be more actively engaged in their learning.

Thanks to technology, projects and assignments can be more creative and easier only with the help of some Office programmes such as Word and PowerPoint. Students without having an access to the Internet can enrich, visualize, and support their projects and assignments by them. With the advancement in technology, specifically the PowerPoint presentations have become popular in the schools and colleges. They enable visual aid that facilitates the students to express their views in an organized way and create assignments that involve higher order more critical or creative thought.

A recent study by Apperson, Laws and Scepansky (2006) examined the impact of PowerPoint on the students' classroom experience. While they found no differences in grades as a result of the use of PowerPoint in the classroom, they found that students in PowerPoint enhanced classrooms responded differently to the classroom experience. Corbeil (2007) strengthened the use of PowerPoint presentations in class with his study on comparing the teaching tools and results indicated that there are no significant differences from pre- to post-test on written production exercises or on essay writing and, therefore, that PowerPoint presentations are as effective as the use of a textbook plus blackboard. The important literature studies about each component of the scale have been tried to be explained in this section. However; to be more specific, as teachers integrate technology into teaching and learning, shifts occur in classrooms therefore, it also essential to understand the other changing roles in technology integrated classrooms in the following part.

I.3.2. Changing Roles in Technology Integrated Classrooms

With the rapid development of technology, a paradigm shift has been seen in educational environment both from the perspective of students and teachers. In the 21st century, the focus directed the attention from teacher-centered to student-centered classroom atmosphere giving teachers the responsibility of being literate in technology and allowing students to take the control of their own learning process. A good many researchers (Bork, 1985; Laboratory for Comparative Human Cognition, 1989; Papert, 1980; Ragosta, 1982) remarked that computers have a powerful effect on the teaching and learning processes and a result more individualized learning occurs and lessons become more student-centered (as cited in Muir-Herzig, 2004). Kern (1996) supported the same idea by emphasizing the shift from the use of the computer for drill and tutorial purposes to a medium for extending education beyond the classroom and reorganizing instruction has resulted in role changes for both learners and teachers. He notes that;

> Learners now view the computer as a medium through which they negotiate meaning through interaction, interpretation, and collaboration rather than as a finite, authoritative informational base for carrying out a stimulated language task. Instead of delegating language instruction to the computer, teachers participate in students' communication and learning and "provide a scaffold for their students' learning with their own knowledge and experience -- even when they are not immediately involved in a communicative exchange." (Kern, 1996, p. 108).

Beliefs about teacher and student roles, about the nature of learning and instruction, and even about technology itself may be barriers for the effective use of technology in classroom. Kozma (1994) strongly believes that powerful new capabilities of computers make it possible to access, represent, process, and communicate information in new ways. These capabilities make it possible to search and organize information, analyze data, represent ideas, simulate complex systems, and communicate with others in ways that were not practical or even possible previously. They also enable new ways of teaching and learning—new activities, new products, and new types of learning (Kozma & Schank, 1998). The changes in educational technology also altered the curriculum and pedagogy. For example in many countries, the use of educational technology is part of an instructional shift toward project-based, constructivist approaches to teaching and learning within a context of school improvement or reform.

Despite thinking all of the changes mentioned and the widespread belief that the technology integrated classes are generally fruitful for learning and teaching process, thiscommon belief may not always be the case. It should be kept in mind that technology can be used well or poorly, and its effectiveness is dependent on how it is used and the purpose of using it (Burbules & Callister, 2000).

I.3.2.1. The Role of Students

Today's students spend their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and all the other toys and tools of the digital age. Children are able to use computers when they are very young, and computers can become a part of their daily life when they are teenagers. Prensky (2001) acknowledges an amazing fact "today's

average college grads have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV)" (p. 1).

In terms of changed new students' roles, Murchú (2005) ranged students' roles as self-learner, team member / collaborator, and knowledge manager / leader. He explains that a range of hardware and software applications supported these new student roles. The most supported role was that of "knowledge manager". In this role, students have access to vast stores of information, either on the Internet or in a limited way. He acknowledges students have a variety of tools that they can use to transform the information into knowledge, tools such as search engines, word processors, multimedia, presentation and web-development software. Means (1997) emphasizes the changes in the classroom roles and organization with the integration of technology. He believes technology help students to become more self-reliant. Moreoever; Lowerison, Sclater, Schmid, and Abrami (2006) suggest that technology has the potential to transform the learning environment from passive to active and more subject to the control of the learner. According to Roblyer (2003), technology may enable the learner to bemore actively involved in his or her own learning (as cited in Davies, Korte & Lavin, 2010). Students may use peer coaching, andteachers may function more as facilitators than lecturers.

In this sense, the literature on young learners' learning brings out in to the open the learning process. Miller and Ceci and Howe (as cited in Schmidt, 1990) insist that young learners learn without conscious awareness. Swaffar et al. (1998) implies that the students' reports ranged from enjoyment of the experience to expressions of strong enthusiasm for using network. The time to think, the lack of pressure, and the permanent nature of the discussion allowing for subsequent error correction were the most frequent advantages cited. Similarly in a study of

British primary school, Nisbet and Shucksmith (1986) argued that strategic behaviour is largely intuitive until the age of fourteen and determined largely by teachers. Okan (2003) supported that idea by stating that the use of a computer is rewarding for children. Because, learners can receive nearly immediate feedback on their efforts, often including entertaining sound effects, graphics, and animations. Therefore, they are more likely to engage in opportunities to use computers. Furthermore technology may enable all students to participate in a range of contexts and maximises authenticity. With television in other languages, for example, including news, commercials, documentaries, and the video which offers life scenes from the target language culture, there is an increased sense of immediacy (Christie et al., 1996).

Today's needs reflect schools to have constantly updating and changing curriculum. An extremelycritical element in making these changes is teacher awareness of the technological society (Minton & Minton, 1987). Besides, today's children like technology in education because they are living in an age of high technology that provides not only the necessities, but also play and recreation. As a result, children are highly aware of the technology and hardware used today. Because of the reasons mentioned; the current study focus on children especially primary students who are effectively engaged in and motivated by technology in their learning, while adults may resist the integration of technology with classroom practice. They are generally far from anxiety, fear or prejudices.

I.3.2.2. The Role of Teachers

As the classroom began to change with the integration of technology, the role of teachers has inevitably changed, too. Teachers have begun to see that they

must learn to work differently with their students in order for education to remain relevant and effective. However, a wide range of factors influence teachers' attitude to technology. With specific reference to ELT, the language programme, the teacher's approach to learning and teaching. Reed, et al. (1995) argue that even one computer course can positively affect teachers' attitudes toward computers, giving them more confidence and convincing them that technology is a valuable tool. Similarly, Lam (2000) notes that teacher confidence is crucial, and adds that teachers have to be convinced about the benefits of computer technology and its easiness.

There are a number of reasons which might impede the use of technology. These include time pressures both outside and during class; lack of resources and materials; insufficient or inflexible guidelines, standards, and curricula; lack of support or recognition for integrating computers; a clash between new technologies at universities and older ones in schools; lack of leadership; and inadequate training and technical support. Other factors that may influence technology use are age, gender, attitudes toward technology, and teaching experience, but the results from studies are inconclusive as to what extent these variables are related to teacher use of technology (Lam, 2000). But technology can never replace the human mind, but it can help expand it. Thus, teachers have a critical role for integrating technology into the classrooms using in relevant and meaningful ways also using it to support curriculum rather than dominating it.

Kozma and Mcghee (2003) also identified the new teacher roles as instructional designer; trainer; collaborator; team coordinator; advisor; and monitoring and assessment specialist. They believe that each role is associated specific activities and is made possible by the use of technology in support of project-based learning and inquiry-based instructional methods.

To sum up, research and technology developments have continuously opened the door of many new trends and methods for teachers such as computers, softwares, interactive programmes, Word Wide Web (www) have provided teachers to enhance their education more enjoyable, interesting, and communicative. Teachers' lessons have become more interactive. Furthermore, from the perspective of students, lessons are not boring anymore. They have the opportunity to engage in activities freely and their needs are taken into consideration. New technologies have pushed teachers to think about their roles in teaching with technology. However, Levy (1997) and Fernandez (2001) discussed that teacher is the important person who decide how the class should be conducted, not the computers, not the Internet. Hence, teacher is not the only source of knowledge but also the person who enlightens students in their darkness.

I.3.2.3. Technological Materials

The fact that advocates the usage of technology in the classroom so as to promote teaching and learning has increased the contribution in the technological equipment progress day by day. Sandholtz et al., (1997) points out the new classrooms that are a mix of traditional and non-traditional learning. Therefore, teachers are changing the physical layout of the classroom along with daily schedules to give students more time on projects. The truth is that technology of one kind has always existed and been used in the educational setting. Classrooms have come a long way throughout the history. The history of educational materials was summarized in Table 3.

In the history of foreign language teaching, the first technological material used in the classrooms was "the horn book". It was used by students for

several centuries, starting in the Mid-15th century, in Europe and America to keep the lessons from being soiled. On the paper there was usually the alphabet and a religious verse which students copy to help them learn how to write (Dunn, 2011).

After the horn book, magic lantern was tried to be used in classes in 1870. It was simply used to project images printed on glass plates in a dark class like the projectors used now. Then 1890, it was replaced with the "chalkboard" which is still one of the most common technologies in education and favoured by almost all teachers at one point. It also gained reputation with the name of "blackboard". Teachers still have been using it to explain grammatical rules as in the Grammar and Translation Method (GTM). However, it was discussed to be a teacher-oriented material and it was seen as not to be practical and creative in terms of language learning (Dunn, 2011).

Just like the chalkboard, the pencils have been also one of the mostly used technologies of all times. Mass-produced paper and pencils became more readily available in 1890 and in 1905 stereoscopes were used to illustrate points made during lessons. They were later supplemented by the film projector and radios in 1930. Radios were used with the aim of sending lessons to schools through a radio station which was firstly made by New York City's Board of Education. A radio program called "schools of the air" began broadcasting to millions of American students. Soon after them, the overhead projector came up which was again a material for the teacher-dominated classroom which provided "drill-and-practice" grammar exercises. The "mimeograph" made copies by being hand-cranked as an early version of photocopier machines followed these advances (Dunn, 2011).

The innovation in the educational materials took on a new significance with the "headphones". During 1950s, language lab lessons where learners had a

lot of opportunities to use drills and repetition, were obligatory for students and were thought to be valuable for oral skills. Therefore, audio-tape came to be the ideal material for the teachers who followed audio-lingual method (ALM), in which students were believed to learn best through constant repetition in the target language. However, because of the inefficient performance of ALM students, despite the existence of language labs, the method was criticised severely (Warshauer & Healey, 1998).

As a result of many criticisms for each up and coming methods and materials, traditional teaching models are replaced by the contemporary technology tools and many softwares featuring audio, visual, animation effects which set a favourable platform in the new English teaching era. By the early sixties, educational televisions emerged which were up to 50 channels that included educational programmes. Then photocopier which was introduced by Xerox appeared in classes in 1959. The next recency was the "Scantron" which removed the need for grading multiple-choice exams (Dunn, 2011).

Table 3

The History of Technological Materials

1650	The Horn Book
1870	Magic lantern
1890	Chalkboard
1900	Pencils
1905	Stereoscope, 3D viewing glasses
1925	Radio and film projector
1930	Overhead projector

1940	Mimeograph
1950	Headphones
1951	Videotapes
1958	Educational TV
1959	Photocopier
1965	Film projector
1972	Scantron
1980	Plato Computer
1985	CD-Rom Driver
1999	Interactive whiteboard, touch screen with a projector
2010	I-pad

(Dunn, 2011).

Particularly after 1980, many innovations in the field of technological materials which are still being used came to light because the teacher oriented teaching style in which teachers stand in front of the class and students simply take notes has changed with student oriented lessons. Plato Computers marked a new epoch for the first time in the U.S. Almost 92 students had to share one computer in those years. The Plato became one of the most-used early computers in education so finally educators reduced the number for each students and one computer started to be used by 4 students (Dunn, 2011).

With the emergence of Plato Computers, CD-Rom drivers which are still being by many teachers in classes to store the knowledge became available. Then by, in 1999, interactive whiteboards took the place of chalkboards. A very recent technology; interactive boards that uses a touch-sensitive white screen, a projector, and a computer are still becoming widespread in classes. Today the classroom is an interactive world where students engage in learning and teachers

only guide students for their different learning styles and needs. Terminally, the most recent innovation is i-Pad which inspired many teachers and students.

The reviewed literature supports the benefits of current technologies such as iPad in education. One of them is Banister's research (2010) in which he conducted a study on the integration of iPod touch in K-12 education. He stated that being one of the recent capabilities, iPod touch, iPhone and iPad encouraged further speculation on exactly for K-12 students. He remarked the impacts of these devices on student learning across the curricula. Likewise, Ostashewski and Reid (2010), acknowledge that teaching strategies which utilize the iPad as a teaching tool benefit from several key affordances over previous iPod generations. They describe a specific application of the iPad in the classroom and also suggested further studies to explore the extended iPad data collection capabilities. In addition to those studies, Melhuish and Falloon (2010) also agreed the benefit of iPad in education and they explored the potential affordances and limitations of Apple iPad in the wider context of emergent mobile learning theory, and the social and economic drivers that fuel technology development.

Recently, the foreign language teaching and learning has gained a new technological perspective by these innovations in the technological materials and learners' view of educational experiences altered dramatically day by day. The new language visions including the exploitation of different learning technologies allow students to freely communicate and collaborate by using the language. Personal computers of today, recently laptops, i-Pads and tablets, the internet and smart boards offer new possibilities to access information communicate and create multi-modal presentations consisting of text, pictures, sound and video (Warshauer & Healey, 1998).

From a more specific point, the advances in computer technology enable teachers to address to different learning strategies, they increase learners'

motivation, minimize pressure and fear and enhance social development in the educational setting (Şahin & Yıldırım, 1999; Akkoyunlu, 2002; Demirel, 2002; Yalın, 2004; Koç, 2005 as cited in Topkaya, 2010). Technology offers great potentials for creative learning, but technology is also totally dependent on the learning strategies in which it is put to work. Learning works best when different channels are used so different materials help reach different students (Knill, 2007). There are many new creative technological tools to reach these students of different learning styles through Internet such as course websites, slides with PowerPoint, online quizzes and online homework, computer labs, smart interactive white boards, online movie clips for fun or to make subjects more interesting, e-mail for help and information, online programs to support the knowledge learnt at school, online games for learning and e-books.

Briefly, as technology is easy to access anytime and anywhere and it allows both learners and teachers to train and update themselves with a variety of media tools requiring the integration of it in foreign language classrooms. Technological advances have exploded as mentioned above especially in the 20th and 21st century; moreover, schools have to purchase these advancements and apply them in their curricula and lessons because each tool provides teachers with a method to actively engage their students in the learning process.

I.4. Technology-Based Learning (TBL)

On the basis of Social Policy Research report, *"Technology-based learning" (TBL) is* the widely accepted term as the learning of content via all electronic technology, including the Internet, intranets, satellite broadcasts, audio and video tape, video and audio conferencing, Internet conferencing, chat rooms,

e-bulletin boards, webcasts and computer-based instruction. TBL term is chosen deliberately as it also encompasses related terms, such as "*online learning"* and "*web-based learning"* that only include learning that occurs via the Internet and "*computer-based learning"* that is limited to learning using computers. At the same time, "*e-learning"* is synonymous with TBL and has largely replaced it in scholarship and industry as the term of choice. Also, The National Educational Technology Standards Projects (NETS) defines technology integration with the following statement:

> Curriculum integration with the use of technology involves the infusion of technology as a tool to enhance the learning in a content area or multidisciplinary setting. Technology enables students to learn in ways not previously possible. Effective integration of technology is achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it professionally. The technology should become an integral part of how the classroom functions — as accessible as all other classroom tools (ISTE, 2000, p. 6).

TBL term is distinguished from *distance learning* or *technology-delivered learning* in that TBL includes methodologies where instructors and learners are in the same room or instruction is computer-based and there is no 'distance' involved. Furthermore, *technology-enhanced learning* describes a methodology in which technology plays a subordinate role and serves to enrich a traditional face-to-face classroom (Koller, Harvey & Magnotta, 2006).

The reviewed literature points out the rare usage of this term in the recent studies; however, with the rapid innovations in technology, students have their own strategies while using technology such as highlighting text, printing materials, listening to the e-books, watching videos, joining distance education, writing in bold or italic, using visual or audial clues or recording their own voice or projects etc. There are very few studies examining this technology based learning strategies through descriptive studies.

Ping Chang (2006) conducted a study to investigate what language learning strategies listed by Oxford (1990) were employed by EFL learners for online English environment. The result showed that the majority of language learners would use the social learning strategies in learning English more than the other strategies. On the other hand, Hallas (2008) handled the situation from the perspective of eight university lecturers and he adapted and developed their classroom based teaching and assessment strategies for the online environment.

The literature suggests that effective online learning may be fostered through the use of student-centered approaches, by means of technology-based learning activities; cooperative learning styles using small group discussions and online debates; simulations and interactive instructional strategies; individual learning projects; and the pursuit of theoretical knowledge through problem solving, investigation and research (Brennan, 2003; Goddard, 2002; Young, 2004 as cited in Hallas, 2008).

Chih Sun (2009) used voice blogs as a platform for an extensive study of language learners' speaking skills by investigating learning strategies. The results indicated that students developed a series of blogging stages, including conceptualizing, brainstorming, articulation, monitoring, and evaluating, and used a wide variety of strategies to cope with blogging-related difficulties, and perceived blogging as a means of learning, self-presentation, information

exchange, and social networking. He avered that blogs can constitute a dynamic forum fostering extensive practices, learning motivation, authorship and development of learning strategies. Another research was designed to identify and assess students' use of strategies relevant to web-based learning in nutrition professional development by Chan Lin and Chan (2010). They identified 33 strategies and grouped into categories as information processing, group coordination and management, self-monitoring, and task refinement. Mei (2009) focused on analyzing the current status and its reason of English independent learning ability, the learning strategies and teaching strategies under the information technology environment.

I.5. Technology Integrated Language Learning Strategies

Due to the changes in the language teaching and learning field, more and more researchers noted if language learners have changed their language learning strategies for online English learning environment. Individual differences postulate different strategies as technology becomes incorporated into classrooms and curricula. Technology-based learning (TBL) in the early 21st century is transforming the way people learn at a time.

As ICTs and e-learning are now so ubiquitous in the language and practices of learning and teaching, it is important that they are thought of as part of a greater whole. Effective integration of technology can be achieved when students are able to select technology tools to help them obtain information in a timely manner, analyze and synthesize the information, and present it appropriately. Clearly, technology cannot be a goal in itself. Without a systemic integration of content and quality professional development for teachers, it is likely to only cause frustration. Technology is useful "insofar as it is handled

competently by teachers and it is integrated into the teaching program as a whole" (Hoven, 1992, p.19).

To summarize the above points, the integration of technology into the educational setting is a required need of today circumstances. The point is that the goal should be a reasoned, balanced, logical approach; to enhance the positives of utilizing various effective, relevant technologies, which meet a pedagogical need in the classroom, while omitting the negatives. The fact is that technology is creating a revolution in learning methods and it is offering better, faster, deeper, and more enduring learning for different learning strategies.

CHAPTER II: METHODOLOGY

We developed a scale which will form the base of practicing Technology Integrated Language Learning Strategies and will help identify the level of TILLS use according to some variables. Thus, the methodology chapter includes information about the development of the 5 points likert type "Scale of Technology Integrated Language Learning Strategies" STILLS and the sub-research questions related to the reliability and validity of the scale which also consists of participants, data collection tools and data analysis methods

II.1. The Development of a likert type "Scale of Technology Integrated Language Learning Strategies" (STILLS)

For developing a 5 points likert type STILLS, various preparations have been made. Different techniques have been applied for the preliminary preparation and item writing, so this part will adress each step taken to develop a scale. Besides, the reliability and validity studies of the scale have been included in the section of II.1.2. and II.1.3.

II.1.1. Preliminary preparation and item writing

To ensure that no important aspect of Technology Integrated Language Learning Strategies (TILLS) has been missed, data was collected through many ways;

1) Students' feedback forms (from the 4^{th} to the 8^{th} grade)
2) Expert feedback forms
3) Review of related literature

The data collected in March-April 2011 with the help of students' feedback form (see Appendix B) consisted of two open-ended questions based on the students' experiences. The student feedback form format were changed many times as the students often answered the open questions easier than writing a composition in which they neglect to answer some major points and the situations were guided. Furthermore, the examples given to clarify the LLS questions were later omitted so as not to affect students' answers. Students were asked two open-ended questions without giving any specific details to express themselves freely. Moreover, a non-structured opportunity might enhance to think about learning strategies and their use in a more personal level.

The first question of the feedback form deals with the web sites that students mostly visit. The most frequently used web sites were listed (see Appendix D), and searched for the opportunities they offer in terms of LLS.

The second question requests to explain students' actual use of learning strategies, and the concrete techniques and strategies they use to make their learning easier and more effective. Besides, it raises the awareness of students giving an insight into where the participants have gained their information on the different language learning strategies.

The feedback instructions and questions were written in Turkish with the purpose of not only enabling the participants to write clearly and freely but also regarding their different backgrounds and English levels. The information was tried to be collected from volunteer participants from different levels of different schools (see Table 4). The student feedback forms were examined in detail by 3 experts, and when needed some statements were further inquired with interviews.

Table 4

TheNumber of Students That Feedback Form Applied According To Grades

Grades	**Number of Students**
4th grades	23
5th grades	16
6th grades	19
7th grades	21
8th grades	18
Total	97

Next, the other data collection form was teacher feedback form (see Appendix C) which shaped the study asking for teachers help based on their own students and experiences. Thanks to the teacher feedback form, more useful information about the students of different schools was received. The forms were sent to English teachers in Turkey through both e-mail and by hand.

Lastly, the related literatures were reviewed for writing the items of the questionnaire such as; Individual Learning Strategies Scale developed by Al-Shabou, Asassfeh and Alshboul, 2010; English Learning Strategy Questionnaire (ELSQ) developed by Chen and Jonas, 2009; Language Learning Strategies developed by Oxford, 1990 were examined in detail and used to write further statements.

To sum up, the data collected through student feedback form, expert feedback form and the reviewed literature were used to create "Technology Integrated Language Learning Strategies Questionnaire" (TILLSQ). The questionnaire first consisted of 90 items, later reduced to 74 items and corrected by experts for structure and relevancy problems (see Appendix F). It was

designed for primary students and written in Turkish following a five-point Likert scale ranging from 1 to 5 (1=never, 2=rarely, 3=sometimes, 4=often, and 5=always) consisting of 74 items. Item example can be seen in table 5. Also, it should be noted that item 31 was reverse coded.

Table 5

A sample for TILLS scale

		Her zaman	Sık sık	Bazen	Nadiren	Hiçbir zaman
1.	İnternette İngilizce bilmediğim bir kelime gördüğümde anlamını yine internetteki online sözlüklerden araştırırım.					
2.	İnternette İngilizce yeni bir kelime gördüğümde anlamını cümleden çıkarmaya çalışırım.					
3.	Sosyal paylaşım sitelerinin dil ayarını değiştirerek (facebook, twitter vs.) İngilizce olarak kullanırım.					
4.	Sosyal paylaşım sitelerinde (facebook, twitter vs.) karşılaştığım İngilizce videoları izlerim.					
5.	Sosyal paylaşım sitelerinde (facebook, twitter vs.) karşılaştığım İngilizce videoları paylaşırım.					
6.	Oyun oynarken, özellikle İngilizce olanları oynamaya çalışırım.					
7.	İnternette yabancılarla sohbet ederken kamerayı / mikrofunu açıp İngilizce konuşmayı denerim.					
8.	İnternette yabancılarla sohbet ederken yazarak sohbet etmeyi tercih ederim.					
9.	"Msn'de" İngilizce sohbetleri ben başlatırım.					
10.	İnternetten altyazısız İngilizce filmler / diziler izleyerek ne demek istediğini anlamaya çalışırım.					
11.	İnternetten İngilizce filmler izlerken Türkçe altyazılı izlerim.					

II.1.2. The Reliability of "Scale of Technology Integrated Language Learning Strategies"

The scale, 5 points likert-type, was conducted to randomly selected 448 primary school students studying at 4^{th}, 5^{th}, 6^{th}, 7^{th} and 8^{th} grades in Mersin. According to the expert views and literature, the number of sample population is asserted to be determined by the five times of item numbers on condition that not being below 100 (e.g.; Tavşancıl, 2002; Child, 2006 as cited in Doğan & Başokçu, 2010; Kurnaz & Yiğit, 2010). Hence, 448 participants (74 items x 5= 370) were defined as the adequate population for the development process of the scale based on the number of items. They were informed about how to complete the scale, and were required to answer each item. They were not asked to write about personal details in order to assure a safe atmosphere. The researcher administered the scale in the classrooms, and the entire procedure lasted about 20 minutes each time.

The data have been analyzed through "SPSS 11 for Windows". Firstly, whether the data is suitable for factor analysis assumptions have been checked, then the factorial structure and the principal component factor analysis have been applied. The items have been rotated through varimax rotation with Kaiser Normalization process. Varimax rotation was employed to determine the number of initial factors. Besides, promax rotation was also employed so as to see whether there is a change in the result. According to the factor analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy test value is .90 and Bartlett's Test of Sphericity values are $\chi 2$: 3282,943, df: 276 ($p<.000$). So, it can be interpreted according to Büyüköztürk (2009), the data has a normal and suitable distribution with a high reliability.

The factor analysis indicates that 14 factors at the beginning of the analysis were extracted (see Table 6). Yet, some factors gave a load to more than

one factor and caused an ambiguity. Therefore, a second factor analysis to sort out the items was required.

Table 6

Rotated Component Matrix

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Q30	,630												
Q52	,626												
Q59	,625											-,340	
Q67	,619												
Q36	,612												
Q58	,611												
Q29	,609												
Q63	,603												
Q64	,599												
Q15	,599						-,390						
Q17	,593												
Q32	,586												
Q69	,586												
Q68	,586												
Q56	,585												
Q49	,576	-,540											
Q12	,576												
Q27	,575												
Q72	,575						,365						
Q75	,573							,301					
Q71	,569												
Q14	,568												
Q33	,567												
Q28	,567												
Q76	,564												
Q53	,562			-,503									
Q50	,561	-,422											
Q16	,560												
Q74	,559												
Q55	,547			-,441									
Q44	,545									,316			
Q73	,543												

Q22	,541											
Q54	,537			-,363								
Q46	,537	,442										
Q24	,525	-,408	411									
Q40	,524											
Q23	,521	-,517										
Q26	,516							-,356				
Q10	,511											
Q62	,507		,451									
Q13	,495	-,429										
Q51	,489	-,436										
Q8	, 370											
Q21	,485											
Q66	,485	,331										
Q42	,483		,365									
Q48	,481			-,358								
Q57	,477	,386										
Q39	,476	,350										
Q25	,472											
Q47	,455		,370			-,310						
Q65	,449											
Q18	,442										-,354	
Q35	,614											
Q37	,427				,383							
Q38	,409				,347	,355						
Q43	,366						-,315					
Q45	,400	,505										
Q20	,426	-,483										
Q60	,420	-,459										
Q41	,481	,431										
Q61	,363		,519									
Q6	, 660				,672							
Q19		,406	,460									
Q11						,376			,397	,350	-,337	
Q31						-,362	,312		,359			,387

The items giving load less than .30 and some items giving load to more than one factor, which leaded to the ambiguity of the strategies preferred by primary school students were removed from the scale. The Cronbach's Alpha value was .95, which can be interpreted as a highly reliable instrument. During item elimination process, total item test correlation, factor analysis and internal consistency coefficient have been evaluated together. The items whose item total correlation is below .40 (66, 37, 57, 39, 43, 38, 11, 61, 31, 47, 42), and loading more than one factor (50, 45, 20, 26, 54, 60) have been eliminated, and after each item elimination, total item test correlation has been recalculated (see Table 7).

Table 7

Rotated Component Matrix

	Component			
	1	2	3	4
Q65	,704			
Q67	,684			
Q62	,629			
Q12	,618			
Q64	,590			
Q71	,555			
Q69	,487			
Q20		,690		
Q23		,680		
Q48		,678		
Q49		,664		
Q24		,661		
Q13		,631		

Q53			,781	
Q46			,693	
Q6			,677	
Q52			,637	
Q19				,696
Q36				,694
Q35				,614
Q41				,538

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a Rotation converged in 6 iterations.

At the end of the factor analysis process, 53 items have been eliminated, and 21 items under four components have formed the scale. Having completed factor analysis, it has been found that the scale has one factor structure with four components in the use of the STILLS used by primary school students. The subfactors were rearranged and renamed depending on the data provided by the experts and reviewed literature. These subfactors were labelled as "The level of Turkish EFL primary school students of TILLS use" in; 'The Internet and Videos', 'Social Life', 'Games', and 'Projects and Assignments'. The item distribution according to the four components takes part below.

Table 8

Classified STILLS Items in regard to *the Components*

COMPONENT 1: THE INTERNET and VIDEO (INTERNET ve VIDEODA)	
12	İzlediğim videolardaki anadili İngilizce olan kişiler gibi konuşmaya çalışırım.
62	İnternetten öğrendiğim İngilizce bir bilgiyi kendi kendime tekrar ederek aklımda tutmaya çalışırım.
64	İngilizce bir kelimeyi internette ilk gördüğüm ya da duyduğum haliyle (resimle, sayfadaki yeriyle vs.) hatırlarım.
65	İnternette sohbet odalarında İngilizce sohbet ederken okulda İngilizce dersinde öğrendiğimiz dilbilgisi yapılarını kullanmaya çalışırım.
67	İngilizce bir video veya müzik dinlerken aynı sesletimi yapabilmek ve kalıbı öğrenmek için kendi kendime o cümleyi tekrarlarım.
69	İnternette İngilizce bir konuşma***yı*** veya şarkıyı dinlerken insanların yaptıkları dilbilgisi hatalarının farkına varırım.
71	İnternette İngilizce olarak sohbet ederken karşımdaki kişi ne demek istediğimi anlamadığında, aynı cümleyi farklı şekilde yazarım.
COMPONENT 2: SOCIAL LIFE (SOSYAL YAŞAMDA)	
13	Bilgisayarımdaki "Word, not defteri" gibi yazma programlarında İngilizce günlük tutarım.
20	İnternet kullanırken İngilizceyle karşılaştığımda yaşadığım duygularımı bir yere yazarım.
23	Bloglarda/forumlarda İngilizceyi daha iyi öğrenmek adına İngilizce tartışmalara katılırım.
24	Cep telefonumdan internete girip İngilizce yazışmalar yaparım.

48	İngilizce elektronik-kitaplar okurum.
49	Dünyadaki güncel haberleri Internet aracılığıyla yabancı gazetelerden okurum
COMPONENT 3: GAMES (OYUNLARDA)	
6	Oyun oynarken, özellikle İngilizce olanları oynamaya çalışırım.
46	Oyun oynarken dil seçeneğinden İngilizceyi seçerek oyun oynarım.
52	Oyun oynarken birçok İngilizce kelime öğrenirim.
53	İnternette İngilizce oyunları oynamayı tercih ederim.
COMPONENT 4: PROJECTS and ASSIGNMENTS (PROJE ve ÖDEVLERDE)	
19	Projelerimi hazırlarken bilmediğim kelimelerin anlamını evdeki sözlüklerden bakmaktansa internetteki online sözlüklerden bakmayı tercih ederim.
35	İngilizce proje ödevlerimi bilgisayarımdaki Word programında hazırlarım.
36	İngilizce proje ödevlerimi bilgisayarımdaki Powerpoint aracılığıyla hazırlarım.
41	Proje ve ödevlerimdeki bilmediğim bir kelimeyi araştırırken yazılışını da bilmediğim için kopyala yapıştır yöntemiyle anlamını araştırırım.

Cronbach alpha coefficient of the scale and subscales were calculated, and its reliability has been found to be high with 0.95; the overall reliability of the

scale. Also this reliability analysis has been applied to four components of the scale separately to understand the internal consistency. The scale provided highly acceptable internal consistency. Component 1 *"The Internet and Video*" .71, Component 2 "*Social Life"* .74, Component 3 "*Games"* .88, and Component 4 "*Projects and Assignments"* .87

After examining the content, all components were renamed under the guidance of field expert views. It would be meaningful to associate with Oxford's strategies to show the relation of language learning through technology with strategies while identifying the components. The first component was named as "The Internet and Videos" including items 12, 62, 64, 65, 67, 69, 71 items since it evaluates the level of Internet and video usage which help learn and practice English of primary students. For the cognitive and memory strategies such as practicing language, applying images and sounds, creating structure for input and output and analysing, reasoning, most of the students apply to Internet and videos unconsciously. For example item 62 and 67 are practising the knowledge by repeating the sounds, words or sentences through using the Internet (chat rooms) and video. On the other hand, item 69 is a good example for analysing the sentence mistakes and being aware of them while listening to a song or speech through a video.

The second component, composed of items 13, 20, 23, 24, 48, 49, was named as "*Social Life"* as it is related to the daily use of language through technology involving the actively use of media, phone, blogs, e-books and news. It would be meaningful when associated with the strategy type of Oxford to show the relation of language learning through technology with strategies mentioned and proved before by the pioneer Oxford. This component's questions refer to the meta-cognitive strategies like, centering learning and arranging, planning

learning. For example, item 23 “I participate to blog discussions in order to develop my English” underlines important points while focusing on a task.

The third component with items 6, 46, 52, 53 was named as “*Games”.* All the items are entirely related with the games played through the Internet and its function on the language learning that practices especially vocabulary. Especially when the age of the students who have enrolled in the current study is taken into consideration, it may seem as a natural component. Primary school students generally meet with the computer by the means of games. Playing games is a part of their life which also lowers their anxiety level. So this component is also related to social and affective strategies. Students cooperate with others, ask questions, and try to understand the words in games to play a game.

Lastly, the fourth component with items 19, 35, 36, 41 was named as “*Projects and Assignments”* because the statements highlight the use of computer, office programmes such as Word and Powerpoint programme and some techniques that a learner applies while searching for an unknown word. So, this component is related with meta-cognitivee strategies, too as for accomplishing their tasks they arrange and plan their learning by the help of some tools available in the computer.

II.1.3. The Validity of the Developed Scale, TILLS

As mentioned in the preliminary item writing part (see Appendix F), the scale items were examined by the field experts to write each question and a group of English language teachers. In the present study for the validity step, exploratory factor analysis was applied. It was applied for the construct validity because it enables to reach the meaningful and identifiable a few numbers of constructs that items can explain (Büyüköztürk, 2004 as cited in Akın et al.,

2007). Also, the scale has been found to have one factor structure with four components, and the positive correlation between the determined components also can be an evidence for being one factor structure with four components. As aforementioned before, all reliability and validity findings can be interpreted as the STILLS is a reliable and valid tool, and can be used with relevant studies.

II.2. Participants

The current study's participants were primary school students studying in different schools in Mersin during the 2011-2012 academic year. There were 165 schools in the main four districts of Mersin; Yenişehir, Mezitli, Toroslar, and Akdeniz and totally 51396 students (see table 9).

Table 9
The Population of Primary School Students Grading 4^{th} - 8^{th} According to Districts of Mersin

4 DISTRICTS	NUMBER of SCHOOL	GIRL	BOY	TOTAL
YENİŞEHİR	30	5509	5095	10604
MEZİTLİ	24	3696	3566	7262
TOROSLAR	51	7867	7414	15281
AKDENİZ	60	9325	8924	18249
TOTAL	165	26397	24999	51396

The participants' age ranged from 10 to 14 years of age, grading from 4th to 8th classes. For defining the adequate population of the profile study, expert views were taken into consideration. The study has been built on three groups of participants; a group of 97 primary students for item writing in the preliminary preparation (see table 3); a group of 448 primary students for developing a reliable scale of TILLS, and a group of 3694 voluntary primary school students from four districts and different levels to reveal the validity and the level of the STILLS use. Defining the general level of use makes sense in terms of students awareness which directly affect the TILL strategies they use.

For the last step, students were given approximately 10 minutes for completing 21 statements with a 5 point likert type scale. The data collected from 2050 girls and 1644 boys in a two-month period, from March through the late April 2011.

On the other hand, according to the reviewed literature and the research questions, participants' grade, level, sex, and school type as variables were added to the scale. The reasons of choosing these four variables for the current research study were defined explicitly below.

The first variable "grade" was chosen as English teaching starts from the 4th grade at the age of 9/10 in public schools in Turkey. In addition, primary school students have compulsory computer lessons in Turkey which provides them with the resources and basic training to use computer in their schools. This study is limited to primary students between 4th and 8th grades who have experience of English courses before.

Furthermore, another variable "level" was added to this study since 4th and 5th grade students were labeled as 1st level or primary education while, 6th, 7th and 8th grade students as 2nd level or secondary education by MEB. In the present study, there are 918 1st level students and 2776 2nd level students.

On the other hand, the "sex" variable has been the focus issue of many studies in the literature. Some of the studies have found no or slight differences, on the other hand some others have tremendously revealed significant gender differences in ICT (Akkoyunlu, 1996; Young, 2000; Göktaş, 2006; Meelissen & Drent, 2008). Akkoyunlu (1996) investigated the effect of integration of computer literacy skills into curriculum on 4th and 5th grades primary students' achievements, computer skills but he did not report any significance difference between girls and boys. However, Göktaş (2006) conducted a similar study and detected some gender differences in his study examining K-12 primary students' perceived ICT competencies and reported that there was a significant effect of gender on perceived ICT competencies scores. Due to the impact of sex in a technological education in the literature, "sex" as a variable was aimed to be identified from a different viewpoint to see its relationship with language learning.

Terminally, the other variable "the school type", makes a significant change for language learning in terms of students' technological opportunities according to many experts. To support this view, Stepp-Granny (2000) reported the importance of technologically equipped classrooms for increasing student's motivation. Anderson and Speck (2001) supported this idea by focusing the language skills development. They believed that using technology in the classroom does not only motivate the learners but it also engages them in speaking, reading, listening and writing. Likewise, Ellinger et al. (2001) conducted a study on the use of internet in language classes. They reechoed that internet, as a constituent tool in education, encourages students and increases autonomous learning bringing enthusiasm into the classroom. Finally, Zengin (2007) emphasized the essential role of technology in the classroom atmosphere and he stated that students are more motivated and interested in multi-media and

technological lessons. In Turkey case, generally public schools lack of technological tools or have limited resources. But this is not the case for private schools. They are donated with well-planned equipments, and they are expected to be the pioneer of the innovations. Thus, the current study, regarding the technology's role in education mentioned above, addressed the participants from both sides; public schools and private schools.

By looking at the variables mentioned, the participants can be thought as a homogenous group since different students both girls and boys from both private and public schools studying in different levelswere selected so as to make a more significant generalization. Table 10 describes the sample population according to variables sex, type of school, level and grade.

Table 10

Descriptive Variables

		GRADE					
		4th	**5th**	**6th**	**7th**	**8th**	**Total**
SEX	**Female**	599	164	270	757	260	2050
	Male	390	143	322	559	230	1644
SCHOOL TYPE	**Public**	568	140	439	836	342	2325
	Private	421	167	153	479	149	1369
LEVEL		918		2776			**3694**
		4-5 grade		6-7-8 grade			

II.3. Data Collection Tools

The scale of Technology Integrated Language Learning Strategies (STILLS) was conducted to the participants to identify primary students' level of Technology Integrated Language Learning Strategies' use. The STILLS was found to.90 internal consistency, and .95 test-retest reliability coefficients. Also, the STILLS' reliability and validity studies were applied for each component. It is found to have a highly acceptable internal consistency with component 1 *"The Internet and Video*" .71, component 2 "*Social Life"* .74, component 3 "*Games"* .88, component 4 "*Projects and Assignments"* .87.

The 21 items in TILLS were put in order randomly without considering the factors they belong to (see Appendix G). The scale has been examined by the experts and a small group of teachers to take its final form. STILLSwas expected to respond on the five frequency uses of each item, ranging from "Her zaman" to "Hiçbir zaman". It was written in Turkish consciously in order to help the students understand the statements better and respond more accurately. STILLS which includes 21 items, was classified in four components and the distribution of statements for each component was given below (see Table 11).

Table 11

The Numbers of the Scale Questions under Four Components

Components	**Question Number**
The Internet and Video	12, 62, 64, 65, 67, 71
Social Life	13, 20, 23, 24, 48, 49
Games	6, 46, 52, 53
Projects and Assignments	19, 35, 36, 41

Researcher administered the scale in the classrooms, and the participants were informed about the aim of the study allowing them about 15 minutes for the entire procedure. The scale was applied to 3694 students (see Table 10).

II.4. Data Analysis Methods

In the present study, factor analysis, descriptive statistics, independent samples T-test and One-way Anova were used as data analysis methods. Factor analysis conducted to see the validity of the STILLS since it reduces the items by regarding the interrelationships among the observed variables (Büyüköztürk, 2009). Descriptive statistics was applied to define the participants' frequent use of 5 points likert-type scale, its components and variables. In addition, independent samples T-test was used to see whether the level of STILLS use differs according to the sex, level and school type of the participants which "is used to ascertain how likely an observed mean difference between two groups" (Bausell, 2002, p. 50). Finally, one-way Anova was used to define whether the use of TILLS level differs according to grade of the participants.

Furthermore the correlation between primary learners' TILLS and their socio-graphic variables have been investigated through Pearson's correlation coefficient analysis for each variable which enable to see if there is a relationship between two variables (Higgins, 2005). The multiple regression analysis was applied in order to clarify whether the level of TILLS use under 4 dimensions. In the present study the significance level has been handled as 0.05 and 0.01.

CHAPTER III: RESULTS AND DISCUSSIONS

This chapter includes the results gathered with the help of factor analysis, descriptive statistical analysis, independent samples t-test and one-way Anova performed on the data obtained by the developed "Scale of Technology Integrated Language Learning Strategies". The interpretations of the results have been presented in the order of the sub-research questions and four variables; sex, grade, level and school type. This chapter examines in detail the sub-titles mentioned above as; "Results and Discussions of the Factor Analysis and Descriptive Statistics", "Independent Samples T-test for TILLS according to sex", "Independent Samples T-test for TILLSaccording to school type", "Independent Samples T-test for TILLS according to level" and "One –way Anova for TILLS according to grades". The results of the research have been discussed by relating them with the earlier studies both on Technology Integrated Language Learning and language learning strategies.

III.1. Results and Discussions of the Factor Analysis and Descriptive Statistics

The scale, 5 points likert-type and 21 items, was conducted to 3694 primary school students in Mersin. According to the factor analysis (see Table 6), there are four components in TILLS used by Turkish primary school students. This factor analysis reveals a similarity with the reliability study of TILLS, which supports the validity at the same time. The load of each item for four different factors has been shown in the Methodology chapter (see Table 7).

This chapter has also some subtitles in accordance with the research questions mentioned before as; "Primary School Students' Level of TILLS Use

with Descriptive Statistics" and "Primary School Students' Level of TILLS Usein regard to Some Demographic Variables".The results have been discussed in the light of present analysis and previous studies.

III.1. 1. Primary School Students' Level of Technology Integrated Language Learning Strategies' Use with Descriptive Statistics

Research Question: What is the level of Turkish EFL primary school students "Technology Integrated Language Learning Strategies" use?

The first research question of the study is mainly about the level of primary school students' TILLS use in Mersin. The data in regard to this research question have been analyzed in accordance with each of the 4 components of the scale and it has been explained in Table 12, 13, 14, and 15.

The coefficient intervals for five point likert type scale are calculated for four intervals (5-1=4) as (4/5= 0,80). The coefficient intervals have been determined and interpreted as 1.00-1.80 for "Never", 1.81-2.60 for "Seldom", 2.61-3.40 for "Sometimes", 3.41-4.20 for "Often" and 4.21- 5.00 for "Always" (İnandı & Özkan, 2006). The level of "TILLS" use has been discussed under four components which were named by the field experts regarding their strategies and functions for learning English as second language.

Table 12

1st Component: Primary Students' level of "Technology Integrated Language Learning Strategies" Use

The Internet and Video (İnternet ve Video)		**N**	**Mean**	**SD**
Q_1	İzlediğim videolardaki anadili İngilizce olan kişiler gibi konuşmaya çalışırım.	3693	2,90	1,517
Q_11	İngilizce bir video veya müzik dinlerken aynı sesletimi yapabilmek ve kalıbı öğrenmek için kendi kendime o cümleyi tekrarlarım.	3693	3,10	1,476
Q_13	İnternetten öğrendiğim İngilizce bir bilgiyi kendi kendime tekrar ederek aklımda tutmaya çalışırım.	3693	3,81	1,267
Q_15	İnternette İngilizce bir konuşma veya şarkıyı dinlerken insanların yaptıkları dilbilgisi hatalarının farkına varırım.	3693	2,69	1,396
Q_18	İnternette İngilizce olarak sohbet ederken karşımdaki kişi ne demek istediğimi anlamadığında, aynı cümleyi farklı şekilde yazarım.	3693	2,99	1,441
Q_20	İnternette sohbet odalarında İngilizce sohbet ederken okulda İngilizce dersinde öğrendiğimiz dilbilgisi yapılarını kullanmaya çalışırım.	3693	3,23	1,483
Q_21	İngilizce bir kelimeyi internette ilk gördüğüm ya da duyduğum haliyle (resimle, sayfadaki yeriyle vs.) hatırlarım.	3693	3,27	1,424
General Mean		3693	3,14	,859

In Table 12, primary school students' level of TILLS use was tackled under the first component "*The Internet and Video"* with mean scores and standard deviation. It is found that Internet and video usage gather in two groups of idea as "often" and mostly "sometimes" ($\overline{X}$ = 3,81 - 3,27). Except from item 13, all the other items (1, 11, 15, 18, 20, 21) were rated as "sometimes" so it can be interpreted that students sometimes apply to the strategies under the component of "The Internet and Video". Especially in the 13th item, the usage of technology shows an increase ($\overline{X}$ =3,81) "İnternetten öğrendiğim İngilizce bir bilgiyi kendi kendime tekrar ederek aklımda tutmaya çalışırım" which deals with the storage of knowledge by repetition. It can be inferred that the more students are exposed to the same knowledge or repeat it, the easier they learn. Saville (1998) supported this idea with his study under the notion of private speech. He found out that most of primary students use a variety of intrapersonal learning strategies such as repetition, recall as well as the other linguistic forms. Along with this supporting finding of Saville (1998), learning requires repetition in the early stages of language learning process, specifically with the young learners (Richards & Rodgers, 2002). So, it can be interpreted that primary students usually use this strategy frequently as discussed in the findings of this study, as well as the intrapersonal strategies for language learning as mentioned in Saville's study.

Items 20 and 21 follow the 13thitem with a mean of 3,27 and 3,23. On the other hand, the least item that students use is item 15 "İnternette İngilizce bir konuşma veya şarkıyı dinlerken insanların yaptıkları dilbilgisi hatalarının farkına varırım". It can be interpreted that students are hardly aware of grammatical mistakes while listening to a song or a speech; instead they focus on the general meaning not the structure. Also it can be stated that students do not often use videos to practice or learn English.

Table 13

2nd Component: Primary Students' Level of "Technology Integrated Language Learning Strategies" Use

Social Life (Sosyal Yaşam)		**N**	**Mean**	**Std. Deviation**
Q_2	Bilgisayarımdaki "Word, not defteri" gibi yazma programlarında İngilizce günlük tutarım.	3693	2,63	1,421
Q_5	İnternet kullanırken İngilizceyle karşılaştığımda yaşadığım duygularımı bir yere yazarım.	3693	2,77	1,492
Q_6	Cep telefonumdan internete girip İngilizce yazışmalar yaparım.	3693	2,26	1,368
Q_7	Bloglarda/forumlarda İngilizceyi daha iyi öğrenmek adına İngilizce tartışmalara katılırım.	3693	2,78	1,445
Q_12	İngilizce elektronik-kitaplar okurum.	3693	2,84	1,453
Q_16	Dünyadaki güncel haberleri yabancı gazetelerden okurum.	3693	2,65	1,450
General Mean		3693	2,65	,899

When the usage of foreign language learning in the social life via technology is examined, the 2nd component of TILLS in the Table 13 enlightens

us about primary school students' general profile. The data analysis in respect to Students' TILLS level of use in "Social Life" with mean scores and standard deviation has been designated above. It is found that Social Life usage gather in two groups of idea as mainly "sometimes" and "seldom" ($\overline{X}$ = 2,84 - 2,26). The most preferred item in this component is item 12 "İngilizce elektronik-kitaplar okurum" with a mean of ($\overline{X}$=2,84). Accordingly, it can be expounded that primary students "sometimes" apply to this strategy to practice their English knowledge. Surprisingly, in the digital age when people cannot catch the innovations, the primary school students can easily adapt the situations and read e-books.

On the other hand, item 6 "Cep telefonumdan internete girip İngilizce yazışmalar yaparım" is rarely preferred with a mean of $\overline{X}$=2,26. Based on some situations mentioned by the students, it can be interpreted that students do not apply to this communicative strategies unlike the expectations from today's digital children. The situations mentioned are generally the results of other controlling groups like parents. Many parents do not approve of getting a phone for their children especially between the ages 10 and 14 and the participants usually stated that they do not have a phone. Infact, some of the students stated this situation during the application of the scale.

When compared to the 1st component, the Internet and Video, this component is less used and "sometimes" applied. This may be a natural result of the opportunities or not belonging the required environment; a computer, the internet or cell phone. However, there is a fact that for the ones, who have the required opportunities or devices at their home, may not be educated well enough in terms of "computer literacy". According to the quantitative results and the interviews, it may also be interpreted that primary students do not use computer

too often for their self development. Although there are some attempts by The Ministry of National Education in terms of curriculum, these are now limited to one hour computer lesson in a week, and some pilot studies in a few schools for an education with tablets.

Table 14

3rd Component: Primary Students' Level of "Technology Integrated Language Learning Strategies" Use

Games (Oyunlar)		**N**	**Mean**	**Std. Deviation**
Q_3	Oyun oynarken, özellikle İngilizce olanları oynamaya çalışırım.	3693	3,34	1,372
Q_10	Oyun oynarken dil seçeneğinden İngilizceyi seçerek oyun oynarım.	3693	3,35	1,401
Q_14	Oyun oynarken birçok İngilizce kelime öğrenirim.	3693	3,37	1,355
Q_17	İnternette İngilizce oyunları oynamayı tercih ederim.	3693	3,02	1,468
General Mean		3693	3,27	,979

The third component "*Games*" with mean scores and standard deviation has been designated above in table 14. Overall items in this component are "sometimes" applied with a general mean of ($\overline{X}$ =3,27). The highest mean score ($\overline{X}$ =3,37) with the item 14 "Oyun oynarken birçok İngilizce kelime öğrenirim" has been detected. This is an expected result as the students in the age 10-14 may be keener on playing games. By this way, they learn different words by concentrating intensively on the input unconsciously for a purpose; to win the game or to pass the other level. Uberman (1998) remarked that through games students have the opportunities to use language in a non-stressful way. They learn words because they are in a context, relevant with the picture, cartoon or they appear again and again at the end of a specific level of the game. Therefore, it can be expounded that games may be a good way to learn especially words as Uberman stated above as they form a relaxed and fun atmosphere.

In addition to offering a fun-filled and relaxing learning atmosphere, games also motivate students by introducing an element of competition into language-building activities. This provides valuable impetus to a purposeful use of language (Prasad, 2003). In other words, these activities can create a meaningful context for language use. Some conducted studies express a similar result on the effectiveness of games. For example; Huyenand Nga's (2003) stated that students seem to learn more quickly and retain the learned materials better in a stress-free and comfortable environment. Furthermore, Nation (2000) signified that "learning new words are a cumulative process, with words enriched and established as they are met again" (p.6). Therefore it can be pointed out that, using games and having critical awareness of the relationships among technology, language, culture, and society are the bridges to learn words meaningfully. By this way, it is almost inevitable to learn new words, their functions, and pronunciation by having fun at the same time. Because of the discussed benefits

of games supported above, it is not very surprising thatall the items in this component are really high and preferred by most of the primary students.

Table 15

4th Component: Primary Students' Level of "Technology Integrated Language Learning Strategies" Use

Projects and Assignments (Proje ve Ödevler)		**N**	**Mean**	**Std. Deviation**
Q_4	Bilmediğim kelimelerin anlamını evdeki sözlüklerden bakmaktansa internetteki online sözlüklerden bakmayı tercih ederim.	3693	3,18	1,472
Q_8	Bilmediğim bir kelimeyi araştırırken yazılışını da bilmediğim için kopyala yapıştır yöntemiyle anlamını araştırırım.	3693	3,27	1,400
Q_9	İngilizce proje ödevlerimi bilgisayarımdaki Powerpoint aracılığıyla hazırlarım.	3693	3,15	1,422
Q_19	İngilizce proje ödevlerimi bilgisayarımdaki Word programında hazırlarım.	3693	3,16	1,438
General Mean		3693	3,20	,947

Lastly, the fourth component of the scale *"Projects and Assignments*" was analyzed with mean scores and standard deviation above (see table 15). The

results based on “Projects and Assignments in TILLS provided a similar data with the third component “Games” with a general mean score ($\overline{X}$=3.20).

Analyzing the items under this component, the general mean indicates that most of the primary students have chosen “sometimes” degree for the items in the scale. Besides, it can be reported that they especially focus on the item 8 ($\overline{X}$=3.27) “Bilmediğim bir kelimeyi araştırırken yazılışını da bilmediğim için kopyala yapıştır yöntemiyle anlamını araştırırım” which is an unusual point of view for teachers but a very common technique for almost many students. On the other side; item 9 “İngilizce proje ödevlerimi bilgisayarımdaki PowerPoint aracılığıyla hazırlarım” has the lowest mean ($\overline{X}$=3.15). This may be a result of both teachers’ and students’ computer literacy, and because it takes time to form a meaningful and purposeful PowerPoint presentation for any subject. However, the variety of projects and assignments can be enriched with more visual tools softwares and programs which are possible with computer and the Internet as in Stemnet’s School Rings Projects example (START, 1996).

III.2. Primary School Students Level of TILLS use in regard to Some Demographic Variables

In this part, the second main research question “Is there a meaningful difference in Turkish EFL primary school students’ “Technology Integrated Language Learning Strategies’ (TILLS) level of use according to some variables?” has been divided into subcategories. The research question was discussed separately according to sex, level, grade and school type variables below.

III.2.1. Independent Samples T-test for STILLS according to sex

Research Question: "Does the level of Primary School Turkish EFL students "TILLS" use differ according to sex?"

In order to answer the first sub-research questions, the independent samples T-test was conducted to 3694 primary school students (2050F/1643M). The TILL strategies according to sex of the participants is statistically measured and it is presented in Table 15, considering sex differences in four different components (C1, C2, C3, C4). The significance of each factor is evaluated in regard to $p < .05$ and $p < .01$, and C3 "Games" and C1 "The Internet and Video" were found significant. Both females and males chose the "sometimes" statement throughout the four components. Especially males apply to the strategies in the dimension of "Games" ($\overline{X}$=3.37). Following this highest mean score, again males use the strategies in "Projects and Assignments" with a mean of ($\overline{X}$=3.22). Besides, it was analyzed regarding the Sig. (2-tailed) for each factor. However, it has been observed that there are no statistically significant differences between female and male participants in the use of "*Social Life*" and "Projects and Assignments" (see Table 16).

Table 16

Primary Students' Technology Integrated Language Learning Strategies According to Sex

	Sex	N	$\overline{X}$	S	t	P
C1 The Internet and Video	Female	2050	3,1118	,87417	-2,495	**,013***
	Male	1643	3,1828	,83875		
C2 Social Life	Female	2050	2,6800	,89904	1,644	,100
	Male	1643	2,6311	,89930		
C3 Games	Female	2050	3,1857	,98211	-5,816	**,000****
	Male	1643	3,3736	,96653		
C4 Projects and Assignments	Female	2050	3,1724	,94796	-1,458	,145
	Male	1643	3,2182	,94755		

*significant at $p < .05$

**** significant at $p < .01$

Indeed, many researchers have specifically targeted the relationship of language learning strategies and sex. Nevertheless; while some research mentioned above focused on the higher females' usage of LLS and games, some other studies highlighted the males' higher level of LLS' use and games. For example, forming the base of the current study and being the pioneer of LLS, Oxford (1990) remarked that females' higher use of strategies more frequently than males. Goh and Foong (1997) signified that there were significant

differences between males and females in the compensation and affective strategies.

On the other hand; the literature on computers in language education also imbued with studies indicating inequities in access to technology for girls (Hess-Biber & Gilbert, 1994; Norton & Pavlenko, 2000). It has been stated that males had more favorable and comfortable attitudes toward computer use and the Internet than female students (Selwyn, 1999; Slate & Manuel, 2002; Usun, 2003). Although girls are thought to be better in language learning strategies, boys in the present study emerged to be higher in the usage of games, the Internet and video.

In accordance with results mentioned in those studies, it may be true for the current study that greater males use "Games" and "The Internet and Video" in TILLS than females. Moreover, this may be the attentive characteristics of boys and that boys generally have tendency for using more technology because of the cultural factors. They do not have many different options to spend their free time. A study by Funk (1993), reveals the fact that compared to girls, boys spend more than twice as much as time per week playing computer games. Parents of sons allow them to spend time in front of a computer as they believe that boys are more energetic and they easily lose attention. Today even the society associate computers, games, and technological devices with boys. In fact, according to a study (Harrell & Gansky & Bradlet et al., 1997) based on the self-reported free time activities, 33% boys reported playing computer games topped the list. Firstly, it was thought that the difference between girls and boys resulted from the violent theme games and lack of female protagonist (Malone, 1981). Sometimes parents are uneducated about computer literacy so, they think that computers enable students to learn more, help them develop their skills, and conduct research for their school project. A more likely reason though, is the disparity between the genders' play differences. While boys tend to prefer to play based on

fantasy, girls tend to prefer play based on reality (as cited in Subrahmanyam et al., 2000).

III.2.2. Independent Samples T-test for STILLS according to school type

Research Question: "Does the level of Primary School Turkish EFL students "TILLS" use differ according to school type?"

The second sub-research question was analyzed according to the school type variable in Table 16. The data resulted with a noteworthy difference between state and private school for all components ($p < .05$; $p < .01$). Interestingly, except from the level of use in the social life, state schools indicated higher use of TILLS ($\overline{X}$ =3.19, $\overline{X}$ = 3.40, $\overline{X}$ = 3.44) than the private schools.

Table 17

Primary Students' Technology Integrated Language Learning Strategies According to School Type

	School	N	$\overline{X}$	S	T	P
The Internet and Video	**State**	2324	3,1907	,92255	2,567	**,010****
	Private	1369	3,1156	,81853		
Social Life	**State**	2324	2,5122	,95335	-7,633	**,000****
	Private	1369	2,7443	,85458		
Games	**State**	2324	3,4425	1,02915	8,322	**,000****
	Private	1369	3,1673	,93441		
Projects and Assignments	**State**	2324	3,3946	,97464	10,065	**,000****
	Private	1369	3,0739	,91135		

*significant at $p < .05$ ****** significant at $p < .01$

One possible reason of these results in terms of the Internet and Video, Games and Projects and Assignments components may be the schooltime. While students in state school generally leave school in the lunch time or in half of the day, students studying in private schools have to attend courses in a whole day period. Another fact for state school students' using more strategies under the components of "Internet and Video" and "Games" is that the government and the National Ministry of Education have given gradually more importance to the education system in Turkey. Recently, a project called "Fatih Project" was launched at the beginning of 2012 academic year to integrate smart boards and tablets to state schools. Since then state school students have been meeting with technology in the daily school life integrated with interdisciplines as well as ICT lessons. This promoted the young learners' technology literacy in 570,000 classrooms in 42,000 state schools across Turkey. Under the reflection on the project mentioned above, it can be stated that students in state schools have been given a technology friendly environment, a teaching and learning atmosphere in which use of technology has been fostered and accelerated.

Besides the fact discussed above, another project launched by the government called "DYNED" (Dynamic Education) in 2006 may have a significant effect on this finding. It is regulated nationally and expected to use of all components of DYNED by two parties-teachers and students- to assist language learning in the primary state schools. This compulsory technological tool also supported state school students' both language learning and technology literacy. Despite the facts discussed above, this result is contrary to what is expected. Typically because of the financial situation, it is assumed that private schools have more technological appliances, and also many of private school students have their own computers, internet and phones. Moreover, teachers receive special education on how to use technology in the classroom and, they are

expected to integrate technology in language learning unlike the state school teachers. When we discussed the picture, we can come to conclusion that students' in state schools level of use for three components; the Internet and Video, Social Life and Projects and Assignments, being higher than the private schools are a beatific result of the improvements in the education system and government policies in Turkey.

On the other hand, when it comes to social life, because of the mentioned limitations of opportunities, or the economic situations, state schools' students' use of "social life" strategies are lower than the private schools' students. This is a natural outcome of the daily life that most of the private school students have. Many of them have the opportunity to go abroad for their summer vacation or holidays, there are also a minority who does their shopping from abroad, they have native teachers for language learning, they usually update their technological appliances such as phones, some of them need to communicate with the native speakers for business purposes etc… Briefly technology and foreign language are joint parts of their daily common life which may the reason of private schools students' using more strategies in the "Social Life" component.

III.2.3. Independent Samples T-test for STILLS according to level

Research Question: "Does the level of Primary School Turkish EFL students "TILLS" use differ according to level?"

In addition to grades variable, primary students' level of TILLS use was tabulated according to level (see Table 17). In March 2012 the Grand National Assembly passed new legislation on primary and secondary education usually termed as "4+4+4" (4 years primary education, first level, 4 years primary

education, second level). According to this regulation, 4th and 5th grades were called as 1st level and 6th, 7th and 8th graders were called 2nd level, but with another recent changes in education system 1st level have become primary school and 2nd level have become secondary school. As it is expected, there has been a statistically meaningful difference in the level variable ($p < .01$). The obtained data demonstrated that 2nd level students use more TILLS than the 1st level students in two dimensions; social life and games ($\overline{X}$ =2.69, $\overline{X}$ = 3.29).

Table 18

Primary Students' Technology Integrated Language Learning Strategies According to Level

	Level	N	$\overline{X}$	S	t	P
The Internet and Video	**4-5 grades**	917	3,1876	,93976	1,796	,073
	6-7-8 grades	2776	3,1288	,83054		
Social Life	**4-5 grades**	917	2,5785	,93227	-3,099	,002**
	6-7-8 grades	2776	2,6846	,88682		
Games	**4-5 grades**	917	3,1987	1,04919	-2,517	,012*
	6-7-8 grades	2776	3,2926	,95446		
Projects and Assignments	**4-5 grades**	917	3,1390	1,02654	,048	-1,982
	6-7-8 grades	2776	3,2106	,91998		

*significant at $p < .05$

** significant at $p < .01$

It may be inferred that when it comes to social life and games, 2nd level students apply to TILLS strategies more often. Unfortunately in the literature, similar studies regarding the level variable could not be designated as Turkey education system differs with other countries. Infact, a review on American students by Oblinger and Oblinger (2005) put forth a fact that virtually all students were using computers by the time they were 16 to 18 years of age but they also added that computer usage is even higher among today's American children. According to their study, students aged 8 to 18, 96% percent have gone online and seventy-four percent have access at home, and 61% percent use the Internet on a typical day. However, for the Turkey case a possible reason may be the experience of the 2nd level students. They are more likely to spend time in front of the computers and experience more situations in the classroom in parallel with the curriculum. Their parents may allow them more to access the technology and they may be more literate for computer usage than the tender ages. On the other hand, there could not be found any statistically meaningful difference in the Internet and Video component which may a result of not requiring too much computer literacy for watching a video and practicing the English they have heard on their own.

III.2.4. One –way Anova for STILLS according to grades

Research Question: "Does the level of Primary School Turkish EFL students "TILLS" use differ according to grade?"

The last variable, grade has been analyzed through One-way Anova in four groups to see the probable relation between 4 components of the scale and

the levels of TILLS use of Primary Students (see Table 18). There has been a statistically meaningful difference in students' grade of TILLS use in the aspects of three components; Internet and Video, Social Life and Games ($p < .01$; $p < .05$).

Table 19

Primary Students' Technology Integrated Language Learning Strategies According to Grades

Variables	Grade	N	$\overline{X}$	Ss		Sum of Squares	df	Mean Square	F	p
The Internet and Video	**4th grades**	989	2,9884	,90387	**Between Groups**	107,918	4	26,979	38,011	,000**
	5th grades	307	3,3067	,86236	**Within Groups**	2617,632	3688	,710		
	6th grades	592	3,4626	,78042	**Total**	2725,550	3692			
	7th grades	1315	3,0469	,80481						
	8th grades	490	3,2271	,87202						
	Total	3693	3,1434	,85920						
Social Life	**4th grades**	989	2,7701	,90537	**Between Groups**	70,521	4	17,630	22,300	,000**
	5th grades	307	2,3708	,89770	**Within Groups**	2915,743	3688	,791		
	6th grades	592	2,6486	,90996	**Total**	2986,265	3692			
	7th grades	1315	2,7309	,85992						
	8th grades	490	2,4289	,90248						
	Total	3693	2,6582	,89936						

Games	**4th grades**	989	3,2907	,97770	**Between Groups**	14,702	4	3,676	3,843	,004**
	5th grades	307	3,1653	1,05223	**Within Groups**	3527,736	3688	,957		
	6th grades	592	3,3885	,96930	**Total**	3542,438	3692			
	7th grades	1315	3,2257	,94047						
	8th grades	490	3,2643	1,03815						
	Total	3693	3,2693	,97954						
Projects and Assignments	**4th grades**	989	3,1610	,98639	**Between Groups**	6,533	4	1,633	1,819	,122
	5th grades	307	3,1336	,98667	**Within Groups**	3310,945	3688	,898		
	6th grades	592	3,1541	,91437	**Total**	3317,478	3692			
	7th grades	1315	3,2213	,93041						
	8th grades	490	3,2643	,92693						
	Total	3693	3,1928	,94792						

*significant at $p < .05$

****** significant at $p < .01$

It can be explicated that while 6th graders use TILLS in terms of the Internet and Video component is the greatest of all the grades ($\overline{X}$=3.46), the 4th graders have the lowest mean ($\overline{X}$=2.99). The second significant result is for the social life, 4th graders use TILLS more than the other grades ($\overline{X}$=2.77) which is unexpected interesting result. In particular, the highest mean score was detected in 6th graders for their level of TILLS use in the "Games" dimension ($\overline{X}$=3. 39).

The result is that 6th graders level of TILLS use via the Internet & video and games have the highest mean score (see Table 19). This may be the result of

passing to secondary school and thus growing up both physically and mentally resulting with a more interest in the new trends that their peers have. Also, it may be explained according to Piaget's formal operation stage which includes children 11 years old and up. 6th graders are generally at the age 12 when they begin their primary education on time. In the formal operation stage, children's thinking about the world changes with the materials they use like the Internet, video and games. As a result, this interaction through Internet brings out students' having competitive intuitions that may increase the usage, as well. From another perspective, 4th and 6th graders are the youngest age group of the 1st level and 2nd level with higher mean scores ($\overline{X}$ =3. 29, $\overline{X}$ =3. 39). So, it is meaningful for those young students spend most of their time playing computer games and hereby they develop different strategies to learn English.

Surprisingly, the 4th graders higher level of TILLS use in social life may be resulted from passing to the first step for a new technological life. This step arises students' interest for using all the possibilities in technology; cells, computer office programs, blogging, and e-books etc. Also, it stands for the Piaget's concrete operational stage that occurs between the ages of 7 and 11 years and is characterized by the appropriate use of logic. During this stage, a child's thought processes become more mature and "adult like." They start solving problems in a more logical fashion. So, the possible reason of this result may be explained with the age factor characteristics that Piaget defined. Accordingly, 4th graders are more socially involved with age-mates than ever before, and the peer group provides support that formerly was offered only within the family. Acceptance by one's peers is of great importance to children in this age group and this may cause 4th grade students to use strategies under "Social Life" component more often than the other grades (Wood, Smith & Grossniklaus, 2001).

Based on the Zhao's (2003) review on recent developments in technology and language learning, the studies on the usage of technology in language learning are limited to college level language learners. He also assumed that very few of them were conducted in K-12 settings. Wherefore, the present study may have a leading role and precedent for other studies.

To sum up, all statements on the level of TILLS use have been evaluated under the light of the four components, it can be elicited that the participated students use technology integrated language learning strategies in diverse parts of life and purposes. The limited studies on the variables' impacts on language learning strategies via technology obstructed to show evidences for the reasons. Howbeit, they are all tried to be explained through the information given by the field experts. Nevertheless, there need to be conducted other similar studies on this subject dealing with each component and technological tools in education especially in the K-12 setting.

CONCLUSION

The current study tries to draw a general portrait of the Technology Integrated Language Learning Strategies concept used by primary school students ranged from the 4th to 8th grades. The study has been built on two basic goals: (1) to develop a scale of technology integrated language learning strategies (STILLS) for primary school students in order to clarify the usage level of TILLS, (2) to find out whether there is a meaningful difference of Turkish EFL primary school students' "Technology Integrated Language Learning Strategies' (TILLS) usage level according to some variables (sex, school type, grade and level).

Even though there have been several studies on technology usage in education, there seems to exist no research on the investigation of TILLS up to date. In fact, this is a very recent concept which has started to be more common day by day. Considering the individual differences, each individual learner has his/ her own strategy to learn a foreign language thus, the present study aims to focus on this lacking side of educational technology in the field of language teaching. Furthermore, it investigates a neglected subject in Turkey; the strategies that are used in technology integrated EFL classrooms.

The first part of the study, introduction serves as a lead into the context of cognitive psychology, dealing with the shift from language learning strategies to TILLS stating the need, aim and significance for 21st century language learning atmosphere. The second part of the study initially gives an insight into language learning strategies concept defining its meaning and classficication by various researchers. The third part of the study, methodology, discussed the development of the 5-points likert type scale called "Technology Integrated

Language Learning Strategies" - STILLS (Teknoloji Tabanlı Dil Öğrenme Stratejileri Ölçeği) (see Appendix G). The fourth part, results and discussion, includes the results gathered with the help of factor analysis, descriptive statistical analysis, independent samples t-test and one-way Anova performed on the data obtained by the developed "STILLS".

To sum up, it can be elicited that the participated students use technology integrated language learning strategies in diverse parts of life and purposes. The development of STILLS has attributed that to the field via validity and reliability analysis within the frame of their educational and cultural context according to some variables. The conspicious results in terms of variables can be summarized as:

- Under the discussion of sex variable in terms of TILLS usage, it has been found out that especially males use more strategies in the dimension of "Games" and "The Internet and Video" than females unlike the study of Oxford (1990). Moreover, Lin (2009) supported this idea with his study in a video-based computer assisted language learning context. He purported that male and female L2 learners used significantly different categories of strategies to comprehend video-based language lessons (as cited in Lin, 2011). With this fact also, teachers and educators may feel the usage of games in language teaching more essential. In other words, they should indicate a new awareness of and appreciation for the role of the student, the role of technology, and the role of the teacher in facilitating learning through technology use.

- Another variable of the study -school type- has indicated the result that state school students use more strategies in "The Internet and Video", "Games" and "Projects and Asssignments" components. Although there is no related literature with this result because of the specific education system in terms of private and state schools in Turkey's case, it can be inferred that students in state

schools have more freedom and space for language learning via technology than private school students. With the recent changes in the policy of language learning and the integration of technology in education by the Ministry of National Education, a great barrier has been overcome. The use of DYNED program in language learning and Fatih Project which brings smart boards and tablets in classes have an undeniable effect on state school students computer literacy level and their awareness to use technology for educational purposes.

- Moreover, the TILLS usage level in terms of level variable indicated that 2nd level student use more strategies than the 1st level students under the components of "Social Life" and "Games". The possible reasons were argued in section III.2.3. in detail. It has been thought that with the gradually progressing education system, they are exposed to more technology experiences in consistent with the age. They spend more time than the 1st level students who are only at the beginning of the discovery. This is consistent with Oblinger & Oblinger's (2005) study. Likewise, he stated that the older the students, the more they are busy with virtual platform.

- Lastly, the TILLS use level was investigated under the question of "Does the level of Primary School Turkish EFL students "TILLS" use differ according to grade?" 6th graders use TILLS in terms of the "Internet and Video" and "Games" components more than the other grades. The second significant result is for the social life, 4th graders use TILLS more than the other grades. These results were discussed under the reflection of Piaget's stages of conceptual development. 6th grades students use Internet & video and games more in consistent with their age that refers to formal operation stage in which students interact with technology. This interaction may bring out their competitive intuitions and increase the usage. On the other hand, 4th graders use more strategies in "Social Life" component may be result of the concrete operational stage when they use

their problem solving abilities with others. From another perspective, 4th and 6th graders are the youngest age group of the 1st level and 2nd level with higher mean scores.

Limitations of the Study

Although being planned carefully, the current study has some unavoidable limitations and shortcomings. First of all, the data collection was confined to only volunteer students of some primary schools in Mersin. The replication of the study at different levels and regions with more population may lead an improved and enriched result. Hereby, the reliability and validity of the developed scale can be strengthened. The STILLS items are limited to the reviewed literature and it is unavoidable that in the preliminary item writing part, some degree of subjectivity of the researchers can be found because of the limited studies on integrated language learning strategies. Besides, because of the time limit, only some variables were taken into consideration in the current study. However; with more detailed information about students' demographic variables different aspects can be discussed. For example; financial situations may affect students' having a technological tool such as computer and cells and parents' education level may be relevant with students' computer literacy and usage frequency.

Implications for Future Studies

Learning strategy literature opens another window for studies on teaching and learning. While the language learning environment is changed from the traditional classroom into an online environment, English learners may

change their learning strategies. According to all LLS literature, the common point is that students can learn and / or practice English when they discover their learning strategy in different learning situations. This is particularly critical to ensure the success in technology based environments as technology has become more and more rapidly common.

The present study has tried to reveal the new growing concept of TILLS only in one cross section in time in this rapidly changing field of study. Regarding the speed of the developments in technology and the continuous studies on technology integration in education, the expiration date of the data may pass by soon. That is why it is recommendable to assess the state of changing strategies relevant with the new tools and participants at certain intervals.

From a pedagogical perspective, technology particularly the computer and the Internet, include both solutions to existing problems and the challenges that we have to solve every day. In other words, technology innovations not only improve the means, but also change the ends (Zhao, Tan, & Mishra, 2000, p. 352). As a result of the challenges and changes, teachers especially in the ELT department need constant training on how to be literate in computer technologies and how to integrate technologies into their classrooms by different in service seminars. Thus, to keep up with the social demands it might be required to look a step further and foresee potential problems by constantly observing similar examples via further studies. Besides, evidence from this research shows the integration of technology has an impact on students' learning strategies, the teacher might as well choose conducting learner-centered courses and tools in practice

Since it is aimed to provide a general snapshot of technology integrated language learning strategies in primary schools, future studies may focus on the different parts of the current study and in-depth analysis to provide more detailed

information. Future studies based on qualitative research methods such as direct observations and interviews may enlighten the hidden depths of the characteristics of the learning process of the TILLS.

References

Albirini, A. (2004). An exploration of the factors associated with the attitudes of high school EFL teachers in Syria toward information and communication technology. In *College of Education* (Vol. Ph.D., pp. 182). Dissertation Abstracts International (UMI No. 3141718): The Ohio State University.

Akın, Ü., Akın, A., Abacı R. (2007). Öz-Duyarlık Ölçeği: Geçerlik Ve Güvenirlik Çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi,* 33, 1-10.

Akkoyunlu, B., & Orhan, F. (2001). The use of computers in K-12 Schools in Turkey. TechTrends, 45(6), 29-31.

Anderson, R & B. Speck. (2001). *Using technology in K-8 literacy classrooms.* Upper Saddle River, N: J: Prentice Hall.

Apperson, J. M., Laws, E. L., & Scepansky, J. A. (2006). The impact of presentation graphics on students' experience in the classroom. *Computers & Education, 47*(1), 116-126.

Arend, B. D. (2004). New patterns of student engagement. *About Campus, 9*(3), 30-32. doi:10.1002/abc.98

Aydın, (2010). A critical review of technology use in English as foreign language learning and teaching: The Tojet Sample.

Bailey, K.M. (1990). The use of diary studies in teacher education programs. In J. C. Richards& D. Nunan (Eds.). Second language teacher education. Cambridge University Press, 215-226.

Banister, S. (2010). Integrating the iPod Touch in K-12 Education: Visions and Vices. Taylor & Francis Online *27* (2), 121-131.

Barak, M., Lipson, A., & Lerman, S. (2006). Wireless laptops as means for promoting active Learning.

Behrmann, M.M. (1995) Assistive technology for students with mild disabilities.

ERIC Clearinghouse on Disabilities and Gifted Education Reston VA. (Eric Document Reproduction Service No. ED 378 755.

Bektaş, M., Ç. (2009). Media literacy courses in faculties of communication in TRNC. Procedia Social and Behavioral Sciences, 1, 446–449.

Berwald, J.P. (1985). Video and Second Language Learning (Special issue). *Studies in Language Learning 5* (1), 3-16.

Blackstone, B., Spiri, J. & Naganuma, N. (2008).Blogs in English language teaching and learning: Pedagogical uses and student responses. *Reflections on English Language Teaching,6* (2), 1–20.

Borras, I. (1993). Developing and assessing "Practicing Spoken French": A multimedia program for improving speaking skills. *Educational Technology Research and Development, 41*(4), 91-103.

Boyd, S. (2003). Are you ready for social software? Retrieved from http://www.stoweboyd.com/message/2006/10/are_you_ready_f.html.

Brett, P. (1997). A comparative study of the effects of the use of multimedia on listening comprehension. *System, 25*(1), 39-53.

Burbules, N. & Callister, T., Jr. (2000). Watch IT: The Promises and Risk of New Information Technologies for Education. Boulder, CO: Westview Press.

ChanLin, J. & Chi Chan, K (2010). Group learning strategies for online course. *Procedia Social and Behavioral Sciences, 2*, 397–40.

Chamot, A. U., & Kupper, L. (1989). Learning strategies in foreign language instruction. Foreign Language Annals, *22*(1), 13-24.

Chapelle, C., & Jamieson, J. (2008). Tips for teaching with CALL: Practical approches to computer-assisted language learning. White Plains, NY:Pearson Education.

Chaudron, C. (1988). *Second language classrooms: Research on teaching and*

learning. Cambridge, UK: Cambridge University Press.

Chen, J. N., Huang, Y. M., & Chu, W. C. (2005). Applying dynamic fuzzy Petri net to web learning system. *Interactive Learning Environments, 13*(3), 159–178.

Chesterfield, R., & Chesterfield, K. B. (1985). Natural order in children's use of second language learning strategies. *Applied Linguistics, 6*, 45-49.

Christie, A., Ronan, P., Sandery, P., Scarino, A., Tudini, V. & Wache, D. (1996). *The Implications of Technology for Language Teaching*. Canberra: Australian Government Publishing Service.

Chomsky, N. (1986). Knowledge of language: Its nature, origin, and use. New York: Praeger.

Chun Shih, C., & Gamon, J. (2002).Relationships among learning strategies, patterns, styles, and achievement in web-based courses. *Journal of Agricultural Education, 43 (4*), 1-12.

Cohen, A. D. (1998). Strategies in learning and using a second language. London: Longman.

Cohen, A. D. & Macaro, E. (2007). Language Learner Strategies. Oxford Publishing.

Coniam, D. (1998). The use of speech recognition software as an English language oral assessment instrument: An exploratory study. *CALICO Journal, 15*(4), 7-23.

Corbeil, G. (2007). Can PowerPoint Presentations Effectively Replace Textbooks and Blackboards for Teaching Grammar? Do Students Find Them an Effective Learning Tool? *CALICO Journal, 24* (3), 631-656.

Carnoy, Martin, Hugh Daley, & Lisa Loop (1986). Education and Computers: Vision and Reality. CERAS, Stanford University, 87-CERAS-14.

Chandra, V. & Lloyd, M. (2008). The methodological nettle: ICT and student

achievement. *British Journal of Educational Technology, 39*, 1087–1098.

Conhaim, W. W. (2002). Blogging: What is it? *Link-Up (USA), 19*(3), 3-8.

Corti, L. (1993) 'Using Diaries in Social Research'. *Social Research Update* 2 Retrieved from: http://sru.soc.surrey.ac.uk/SRU2.html

Çakır, İ. (2010). The use of video as an audio-visual material in foreign language teaching classroom. *The Turkish Online Journal of Educational Technology – TOJET, 5* (4), 1303-6521.

Davies, T., L.; Korte, L.; & Lavin, A., M. (2010). The impact of classroom technology on student behavior. *Journal of Technology Research*. Retrieved from http://www.aabri.com/manuscripts/10472.pdf

Dede, C. (1997). Six Challenges for Educational Technology. George Mason University. Retrieved from: http://www.virtual.gmu.edu/pdf/ascd.pdf

Derwing, T., Munro, M., & Carbonaro, M. (2000). Does popular speech recognition software work with ESL Speech? *TESOL Quarterly, 34*(3), 592-602.

Dieu, B. (2004). Blogs for language learning. *Essential Teacher*, 26-30.

Dunn, Jeff (2011). The Evolution of Classroom Technology. Retrieved from: http://edudemic.com/2011/04/classroom-technology/

Ellinger, B. S, Sandler, D. D, Chayen. K, Goldfrad. J, Yarosky. (2001).Weaving the web into an EAP reading program.*English Teaching Forum.* April.

Ellis, R. (1994). *Understanding second language acquisition*. Oxford, UK: Oxford University Press.

El-Shamy, S. (2001). Training Games: Everything You Need to Know About Using Games to Reinforce Learning. Virginia: Stylus.

Ersoz, A. (2000). Six games for the EFL/ESL classroom. *The Internet TESL Journal, 6* (6). Retrieved from

http://iteslj.org/Lessons/Ersoz-Games.html.

Fernadez, M. V. The EFL teacher and the introduction of multimedia in the classroom. Computer-Assisted Language Learning. 2001, *14* (1): 3-14

Gardner, H. (1983). *Frames of Mind.* New York: Basic Book Inc.

Godwin-Jones, R. (2009). Personal learning environments. *Language Learning & Technology, 13*(2), 3-9. Retrieved from: http://llt.msu.edu/vol13num2/emerging.pdf.

Godwin-Jones, R. (2010). Literacies and Technologies revisited. *Language Learning & Technology, 14*(3), 2-9. Retrieved from: http://llt.msu.edu/issues/october2010/ emerging.pdf.

Gonzalez-Edfelt, N. (1990). Oral interaction and collaboration at the computer: Learning English as a second language with the help of your peers. *Computers in the Schools, 7*(1/2), 53-90.

Göktaş, Y. (2006). The current status of Information and Communication Technologies integration into schools of teacher education and K-12 in Turkey. Unpublished Ph.D. thesis, METU, Ankara, Turkey.

Groff, J., & Mouza, C. (2008). A framework for addressing challenges to classroom technology use. *Association for the Advancement of Computing in Education (AACE) Journal, 16* (1), 21-46.

Hallas, J. (2008).Rethinking teaching and assessment strategies for flexible learning environments. Proceedings ascilite Melbourne.

Herczeg, M. & Kindsmüller, M. C. (2008). The computer literacy scale (CLS) for older adults – development and validation. Mensch & Computer: Viel Mehr Interaktion. München: Oldenbourg Verlag,7-16.

Higgins, J. (2005). The Correlation Coefficient. In *Radical Statistician* (Ed.). Retrieved from http://www.biddle.com/documents/bcg_comp_chapter2.pdf

Hess-Biber, S., & Gilbert, M. K. (1994). Closing the technological gender gap: Feminist pedagogy in the computer-assisted classroom. Teaching Science, 22, 19-31.

Hoven, D. (1992). CALL in a language learning environment. *CAELL Journal, 3*(2), 19-27.

Hourigan,T. & Murray, L. (2010). Using blogs to help language students to develop reflective learning strategies: Towards a pedagogical framework. *Australasian Journal of Educational Technology*, *26*(2), 209-225.

Hrastinski, S. (2008). Asychronous and Synchronous E-learning. *EDUCASE Quarterly*, *31*(4).

Huang, Y., Chen,J., Huang, T., Jeng, Y.& Kuo, Y. (2008). Standardized course generation process using dynamic fuzzy Petri nets. Expert Systems with Applications, *34*(1), 72–86.

Hussain, A., Iqbal. Z., Akhtar, A. (2010). Technology Based Learning Environment and Student Achievement in English as a Foreign Language in Pakistan. *World Academy of Science, Engineering and Technology*, *61*, 129-133.

Huyen, N.T.T. & Nga, K.T.T. (2003). The effectiveness of learning vocabulary through games. *Asian EFL Journal* (5). Retrieved from: http://www.asian-efl-journal.com/dec_03_sub.Vn.html.

International Society for Technology in Education (ISTE), (2000). *National educational technology standards for students: Connecting curriculum and technology*. Retrieved from: http://cnets.iste.org/students/s_book.html

ISTE. (2007). National Educational Technology Standards for Students. Retrieved from:

http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/ 2007 Standards/NETS_for_Students_2007_Standards.pdf

Jeng, Y., Wang, K. & Huang, Y. (2009). Retrieving video features for language acquisition. Expert Systems with Applications 36 (1) 5673–5683.

Jonassen, D. H. (2000), *Computers as Mindtools for Schools: Engaging Critical Thinking (2nd Ed.).* Columbus, OH: Merrill/Prentice-Hall.

Kay, R., H. &Lauricella**,** S., L. **(**2011). Exploring theBenefits and Challenges of Using Laptop Computers. Canadian Journal of Technology/RCAT, 37 *(1).*

Kern, R. (1996). Computer-mediated communication: Using E-mail exchanges to explore personal histories in two cultures. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning: Proceedings of the Hawai'i symposium,* 105-109.

Knill, O. (2007). Benefits and Risks of Media and Technology in the Classroom. Retrieved from: www.math.harvard.edu/~knill/pedagogy/benefits/paper.pdf

Kolar, R. L., Sabatini, D. A., & Fink, L. D. (2002). Laptops in the classroom: Do they make a difference? *Journal of Engineering Education*, *91*(4), 397-401.

Koller, V., Harvey, S.& Magnotta, M. (2006). Technology-Based Learning Strategies. Social Policy Research Assosiates, 1-52.

Kozma, R. (1994). Will media influence learning? Reframing the debate. *Educational Technology Research and Development*, *42*(2), 7-19.

Kozma, R., & McGhee, R. (2003). New Teacher and Student Roles in the Technology-Supported Classroom. Retrieved from: http://www.edtechcases.info

Kozma, R., & Schank, P. (1998). Connecting with the twenty- first century:

Technology in support of educational reform. In C. Dede (Ed.), *Technology and learning*. Washington,DC: American Society for Curriculum Development.

Lee, S. K. (1995). Creative games for the language class. *Forum, 33*(1). Retrieved from: http://exchanges.state.gov/forum/vols/vol33/no1/p35.htm

Lessard- Clouston, M.(1997). Language Learning Strategies: An Overview for L2 Teachers. *The Internet TESL Journal*. Retrieved from:http://iteslj.org/Articles/Lessard-Clouston-Strategy.html

Levy, M.(1997). Computer-assisted language learning: Context and conceptualization. Oxford: Clarendon Press.

Liaw, M. (1997). An analysis of ESL children's verbal interaction during computer book reading. *Computers in the Schools, 13*(3/4), 55-73.

Lin, F., L. (2011). Gender Differences in L2 Comprehension and Vocabulary Learning in the Video-based CALL Program. *Journal of Language Teaching and Research, 2* (2), p. 295-301.

Lindorth, T., & Bergquist, M. (2010). Laptopers in an educational practice: Promoting the personal learning situation. *Computer & Education, 54*(2), 311-320.

Lonergan, Jack. (1992). Video in Language Teaching. Cambridge: Cambridge University Press.

Lowerison, G., Sclater, J., Schmid, R. F., & Abrami, P. C. (2006). Student Perceived Effectiveness of Computer Technology Use in Post-secondary Classrooms. *Computer and Education, 47,* 465-489.

Mackinnon, G. R., & Vibert, C. (2002). Judging the constructive impacts of communication technologies: A business education study. *Education and Information Technologies, 7*(2),127-135.

Means, B. (1997). Critical Issue: using technologyto enhance engaged learning

for at-risk students. Retrieved from: www.ncrel.org/sdrs/areas/issues/students/atrisk/400

Mei, Z. (2009). Strategies of English Independent Learning Ability Based on Information Technology. *IEEE Computer Society, International Forum on Information Technology and Applications,* 299-302.

Mehlinger, H. D., & Powers, S. M. (2002). *Technology and Teacher Education: A Guide for Educators and Policymakers.* Boston: Houghton Mifflin.

Meelissen, M. R. M., & Drent, M. (2008). Gender differences in computer attitudes: Does the school matter? *Computers in Human Behavior, 24(*3), 969-985.

Melhuish, K. & Falloon, G. (2010). Looking to the future: M-learning with the iPad. *Computers in New Zealand Schools: Learning, Leading, Technology, 22* (3).

Merlet, S. (2000). Understanding multimedia dialogues in a foreign language. *Journal of Computer Assisted Learning, 16*(2), 148-159.

Meskill, C., & Anthony, N. (2010). Teaching languages online. Bristol, UK: Multilingual Matters.

Minton, B. & Minton, G. (1987). Teaching technology to children. Worcester, MA: Davis.

Muir- Herzig, R. G. (2004). Technology and its impact in the classroom. *Computers & Education 42*, 111–131. Retrieved from: http://te886.pbworks.com/f/Tech+in+the+Classroom.pdf

Murchú, D., O. (2005). New Teacher and Student Roles in the Technology-Supported, Language Classroom. Research Fellow in ICT and Education, Trinity College, Dublin, Ireland.

Naiman, N., Frohlich, M., Stern, H. H., & Todesco, A. (1978). *The Good Language Learner.* Toronto: Ontario Institute for Studies in Education.

National Technology Education Plan (2010). Transforming American Education Learning Powered by Technology. Retrieved from: http://www.ed.gov/technology/netp-2010

Nicol, D. J., & MacLeod, I. A. (2005). Using a shared workspace and wireless laptops to improve collaborative project learning in an engineering design class. *Computers & Education*, *44*(4), 459-475.

Nisbet, J. & Shcksmith, J. (1986). Learning Strategies, London, Routledge, Kegan & Paul.

Norton, B., & Pavlenko, A. (Eds.). (2000). Gender and English language learners. Virginia: Teachers of English to Speakers of Other Languages, Inc.

Nguyen, T. T. H., & Khuat, T. T. N. (2003). Learning vocabulary through games. *Asian EFL Journal.* Retrieved from: http://www.asian-efljournal.com/dec_03_sub.Vn.php

Oblinger, D. & Oblinger, J. (2005). Educating the Net Generation. An EDUCAUSE e-book. Retrieved from: http://net.educause.edu/ir/library/pdf/pub7101.pdf

Okan, Z. (2003), Edutainment: Is Learning at Risk? *British Journal of Educational Technology*, 34, 255.

O'Malley, J. M., Chamot, A.U., Stewener-Manzaners, G., Russo, R. P., &

Kupper, L. (1985). Learning Strategy Applications with Students of English as a Second Language. *TESOL Quarterly*, *19*, 3.

Oravec, J. A. (2002). Bookmarking the world: Weblog applications in education. *Journal of Adolescent & Adult Literacy, 45*(7), 616-621.

Ostashewski, N. & Reid, D. (2010). iPod, iPhone, and now iPad: The elotuion of multimedia access in a mobile teaching context. In proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications, 2862-2864. Retrieved from:

http://www.editlib.org/p/35046.

Oxford, R., & Nyikos, M. (1989). Variables affecting choice of language learning strategies by university students. *Modern Language Journal, 73*(3), 291-300.

Oxford, R. (1985). A new taxonomy of second language learning strategies. Washington, DC: Center for Applied Linguistics.

Oxford, R.L. (1990). Language Learning Strategies: What Every Teacher Should Know. Newbury House, New York.

Oxford, R. (1994). Language learning strategies: An Update. ERIC Clearinghouse on Language and Linguistics. Retrieved from: http://www.cal.org/ericcll/digest/oxford01.html.

Oxford, R.L.,1996. Employing a questionnaire to assess the use of language learning strategies. *Applied Language Learning 7* (1&2), 25–45.

Oxford, R., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning. *System, 23*(1), 1-23.

O'Malley, J.M., & Chamot, A. (1990). Learning Strategies in Second Language Acquisition. Cambridge: Cambridge University Press.

Picciano, A., G. (2002). Educational Leadership and Planning for Technology. Pearson Education.

Ping Chang, Y. (2006). Learners' Language Learning Strategies for the Online English Language Learning.

Pivec, M., & Dziabenko, O. (2010). Game-based Learning Framework for Collaborative Learning and Student E-teamwork. Retrieved from: www.ementor.edu.pl/_xml/wydania/4/42.pdf

Politzer, R. (1983). An Exploratory study of self-reported language learning behaviors and their relation to achievement. *Studies in Second Language*

Acquisition, *6*, 54-65.

Politzer, R., & McGroarty, M. (1985). An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly*,19, 103-124.

Prasad, U. 2003. Achieving communicative competence in English. *India's National Newspaper* (29, July). Retrieved from: http://www.hindu.com/thehindu/edu/2003/07/29/stories/2003072900010200.htm

Prensky, M. (2001). Digital Natives, Digital Immigrants.*On the Horizon.* MCB University Press, *9* (5).

Prensky, M. (2004). What Can You Learn From A Cell Phone? – Almost Anything. *Journal of Online Education, 1* (5). Retrieved from: http://www.ojc.edu/content/facultyStaff/What%20Can%20You%20Learn%20from%20a%20Cell%20Phone_%20Almost%20Anything!.pdf

Ranasinghe, A., I & Leisher, D. (2009). The Benefit of Integrating Technology into the Classroom. International Mathematical Forum, *4* (40).

Reid, J. (Ed.). (1995). Learning Styles in the ESL/EFL Classroom. Boston: Heinle & Heinle.

Richards, Jack C., & Rodgers, T. (2002). *Approaches and Methods in Language Teaching*. Second Edtition. New York:Cambridge University Press.

Roblyer, M. (2003). Integrating Educational Technology into Teaching. (3rd ed.) Upper Saddle River, NJ: Merrill Prentice Hall.

Rubin, J. (1975). What the 'good language learner' can teach us. TESOL Quarterly, 9, 41−51.

Ru-Si C., and Chin-Chung. T. (2007). Gender Differences in Taiwan University Students' Attitudes toward Web-Based Learning. *Cyberpsychology & Behavior, 10* (5), 645-654.

Saban, A. (2007). Seçmeci okul teknoloji planlama modeli ve özel Konya Esentepe İlköğretim Okulu teknoloji profili. Sosyal Bilimler Enstitüsü Dergisi, 22 *(1),* 23-43.

Sandholtz, J., Ringstaff, C., & Dwyer, D. (1997). Teaching with technology: creating student- centered classrooms. New York: Teachers College Press.

Saricoban, A. & Metin, E. (2000). Songs, verse and games for teaching grammar. *The Internet TESL Journal* 6(10). Retrieved from: http://iteslj.org/Techniques/Saricoban-Songs.html

Saville, M. (1998). Private speech: evidence for second language learning strategies during the 'silent' Period. *Journal of Child Language*, *15*(3), 567-590.

S.C., Yang, & Y. F. Huang, (2008). A study of high school English teachers' behavior, concerns and beliefs in integrating information technology into English instruction. Computers in Human Behavior 24, 1085–1103.

Schieffelin, B. B., & Ochs, E. (1986). Language socialization. Annual review of anthropology, 15, 163-191.

Secules, T., Herron, C., & Tomasello, M. (1992). The effect of video context on foreign language learning. Modern Language Journal, 76, 480-490.

Selwyn, N. (1999). Students' attitudes towards computers in sixteen to nineteen education, Education and Information Technology, *4* (2) 129-141.

Skehan, P. (1989). *Individual differences in second language learning. Studies in Second Language Acquisition*, *13*, 275-298. Cambridge University Press.

Skolnik, R., & Puzo, M. (2008). Utilization of laptop computers in the school of business classroom. *Academy of Educational Leadership Journal*, *12*(2), 1-10.

Slate, J. R. & Manuel, M. (2002). Assessment & Evaluation in Higher Education,

27(1), 75-93.

Sleeter, C. & Tettagah, S. (2002). Technology as a tool in multicultural teaching. *Multicultural Education, 10* (2), 3 – 9.

Smolin, L.I. & Lawless, K.A. (2003). Becoming literate in the technological age: New responsibilities and tools for teachers. *The Reading Teacher, 56* (6), 570 – 577.

Son, J., B. (2004). Internet-based language instruction: Study book. Toowoomba, Australia: Distance Education Centre, University of Southern Queensland.

Son, J., B. (2011). Online Tools for Language Teaching. *The Electronic Journal For English as a Second Language (TESL-EJ),15*(1). Retrieved from: http://www.tesl-ej.org/wordpress/issues/volume15/ej57/ej57int/

Special Needs Technology Assessment Resource Support Team (START), 1996. Meeting the Needs of Exceptionally Able Students. The Division of Student Support Services, Newfoundland and Labrador Department of Education Programming for Individual Needs: Using Technology to Enhance Students' Differing Abilities.

Stepp-Greany, J. (2002).Student perceptions on language learning in a Technological environment: Implications for the new millennium. *Language Learning & Technology, 6* (1), 165-180.

Subrahmanyam, K., Kraut, R. E., Greenfield, P. M. (2000). The Impact of Home Computer Use on Children's Activities and Development. *The Future of Children Children and Computer Technology 10* (2).

Summak, M. S. (2010). Technology readiness of primary school teachers: A case study in Turkey. *Procedia Social and Behavioral Sciences 2, 2671–2675.*

Sun, C. (2009). Voice blog: an exploratory study of language learning. *Language*

Learning & Technology,13, (2), 88-103.

Swaffar, J., Romano, S., Markley, P. & Arens K. (1998), *Language Learning Online*. Austin, TX: The Deadalus Group, Inc.

Tarone, E. (1981). Some thoughts on the notion of communication strategy. *TESOL Quarterly, 15*(3), 285-295.

Taylor, L.M, Casto, D.J. & Wall, R.T. (2007). Learning with versus without technology in elementary and secondary school. *Computers in Human Behavior, 23*, 798-811.

Terrell, T.D. (1993). Comprehensible input for intermediate foreign language students via video. IALL. Journal of Language Learning Technologies 26 (2), 17-23.

Topkapi, E. (2010). Pre-service English language teachers' perceptions of Computer self-efficacy and general self-efficacy. *The Turkish Online Journal of Educational Technology, 9* (1).

Uberman, A. (1998). The use of games: for vocabulary presentation and revision. *English Teaching Forum* 36 (1):20. Retrieved from: http://exchanges.state.gov/forum/vols/vol36/no1/p20.htm

Underwood, J., Baguley, T., Banyard, P., Coyne, E., Farrington-Flint, L., & Selwood, I.S. (2008). Impact 2007: Personalising Learning with Technology. Coventry: Becta.

U.S. Department of Education, Ofice of Planning, Evaluation, and Policy Development, Evaluation of Evidence-Based Practices in Online Learning (2009). A Meta-Analysis and Review of Online Learning Studies, Washington, D.C.

Ward, J. M. (2004). Blog assisted language learning (BALL): Push button publishing for the pupils. *TEFL Web Journal*, *3*(1). Retrieved from:

http://www.espworld.info/Articles_26/push%20button%20publishing%20ward%202004.pdf

Warschauer, M. & Healey, D. (1998), *Computers and Language Learning: An Overview. Language Teaching* 31, 57-71. Retrieved from: www.lll.hawaii.edu/web/faculty/markw/overview.html.

Warschauer, M. (2010). New tools for teaching writing. *Language Leanring & Technology, 14* (1), 3-8. Retrieved from: http:// llt.msu.edu/vol14num1/commentary.pdf.

Weaver, B. E., & Nilson, L. B. (2005). Laptops in class: What are they good for? What can you do with them? *New Directions in Teaching and Learning, 101*, 3-13.

Wenden, A. & Rubin, J. (1987). Learner Strategies in Language Learning. New Jersey: Prentice Hall.

Williams, M. & Robert L. Burden. (1997). Psychology for Language Teachers: A Social Constructivist Approach. Cambridge: CUP.

Wood, K. C., Smith, H., Grossniklaus, D. (2001). Piaget's Stages of Cognitive Development. In M. Orey (Ed.), Emerging perspectives on learning, teaching, and technology. Retrieved from: http://projects.coe.uga.edu/epltt/

Yang, J., Chen, C. & Jeng, M. (2010). Integrating video-capture virtual reality technology into a physically interactive learning environment for English learning. *Computers & Education 55* (1) 1346–1356.

Young, B.J. (2000). Gender differences in student attitudes towards computers. Journal of Research on Computing in Education, 33(2), 204-217.

Yurdakul, C., & Çaglayan, M. U. (1997). *Bilgi teknolojileri Türkiye için nasil bir gelecek hazirlamakta?* Istanbul: Türkiye Is Bankasi Yayinlari. The History of Technology in the Classroom. Retrieved from:

http://www.ehow.com/about_5544014_history-technology-classroom.html#ixzz1qRTUxMTS.

Zengin, R. (2007). A research about the English language teachers' use of instructional technologies in Turkey. *Journal of the Hasan Ali Yücel Faculty of Education.*

Zhao, Y. (2003). Recent Developments in Technology and Language Learning: A Literature Review and Meta-analysis. *CALICO Journal, 21* (1), p. 7-27.

Zhao, Y., Tan, S. H., & Mishra, P. (2000). Teaching and learning: Whose computer is it? *Journal of Adolescent & Adult Literacy, 44*(4), 348-354.

LIST OF APPENDICES

APPENDIX A: Dil Öğrenme Stratejileri Envanteri (Oxford, 1990)

DİL ÖĞRENME STRATEJİLERİ ENVANTERİ

Oxford (1990)

Dil Öğrenme Stratejileri Envanteri İngilizce'yi Yabancı Dil olarak öğrenenler için hazırlanmıştır. Bu envanterde İngilizce öğrenmeye ilişkin ifadeler okuyacaksınız. Her ifadenin sizin için ne kadar doğru ya da geçerli olduğunu, derecelendirmeye bakarak, 1, 2, 3, 4, 5' ten birini yazınız. Verilen ifadenin, nasıl yapmanız gerektiği ya da başkalarının neler yaptığı değil, sadece sizin yaptıklarınızı ne kadar tasvir ettiğini işaretleyiniz. Maddeler üzerinde çok fazla düşünmeyiniz. Maddeleri yapabildiğiniz kadar hızlı şekilde, çok zaman harcamadan ve dikkatlice işaretleyip bir sonraki maddeye geçiniz. Anketi cevaplandırmak yaklaşık 10-15 dk. alır.	1= Hiçbir zaman doğru değil	2= Nadiren doğru	3= Bazen doğru	4= Sık sık doğru	5= Her zaman doğru

BÖLÜM A:

1. İngilizce'de bildiklerimle yeni öğrendiklerim arasında ilişki kurarım.	1	2	3	4	5
2. Yeni öğrendiğim kelimeleri hatırlamak için bir cümlede kullanırım.	1	2	3	4	5
3. Yeni öğrendiğim kelimeleri akılda tutmak için kelimenin telaffuzuyla aklıma getirdiği bir resim ya da şekil arasında bağlantı kurarım.	1	2	3	4	5
4. Yeni bir kelimeyi o sözcüğün kullanılabileceği bir sahneyi ya da durumu aklımda canlandırarak, hatırlarım.	1	2	3	4	5
5. Yeni kelimeleri aklımda tutmak için, onları ses benzerliği olan kelimelerle ilişkilendiririm.	1	2	3	4	5
6. Yeni öğrendiğim kelimeleri aklımda tutmak için küçük kartlara yazarım.	1	2	3	4	5
7. Yeni kelimeleri vücut dili kullanarak zihnimde canlandırırım.	1	2	3	4	5
8. İngilizce derslerinde öğrendiklerimi sık sık tekrar ederim.	1	2	3	4	5
9. Yeni kelime ve kelime gruplarını ilk karşılaştığım yerleri (kitap, tahta ya da herhangi bir işaret levhasını) aklıma getirerek, hatırlarım.	1	2	3	4	5

BÖLÜM B:

10. Yeni sözcükleri birkaç kez yazarak, ya da söyleyerek, tekrarlarım.	1	2	3	4	5
11. Anadili İngilizce olan kişiler gibi konuşmaya çalışırım.	1	2	3	4	5
12. Anadilimde bulunmayan İngilizce'deki **"th /θ / hw "** gibi sesleri çıkararak, telaffuz alıştırması yaparım.	1	2	3	4	5
13. Bildiğim kelimeleri cümlelerde farklı şekillerde kullanırım.	1	2	3	4	5
14. İngilizce sohbetleri ben başlatırım.	1	2	3	4	5
15. T.V.'de İngilizce programlar ya da İngilizce filmler izlerim.	1	2	3	4	5
16. İngilizce okumaktan hoşlanırım.	1	2	3	4	5
17. İngilizce mesaj, mektup veya rapor yazarım.	1	2	3	4	5
18. İngilizce bir metne ilk başta bir göz atarım, daha sonra metnin tamamını dikkatlice okurum.	1	2	3	4	5
19. Yeni öğrendiğim İngilizce kelimelerin benzerlerini Türkçe'de ararım.	1	2	3	4	5
20. İngilizce'de tekrarlanan kalıplar bulmaya çalışırım.	1	2	3	4	5
21. İngilizce bir kelimenin, bildiğim kök ve eklerine ayırarak anlamını çıkarırım.	1	2	3	4	5
22. Kelimesi kelimesine çeviri **yapmamaya** çalışırım.	1	2	3	4	5
23. Dinlediğim ya da okuduğum metnin özetini çıkarırım.	1	2	3	4	5

BÖLÜM C:

24. Bilmediğim İngilizce kelimelerin anlamını, tahmin ederek bulmaya çalışırım.	1	2	3	4	5
25. İngilizce konuşurken bir sözcük aklıma gelmediğinde, el kol hareketleriyle anlatmaya çalışırım.	1	2	3	4	5
26. Uygun ve doğru kelimeyi bilmediğim durumlarda kafamdan yeni sözcükler uydururum	1	2	3	4	5

27. Okurken her bilmediğim kelimeye sözlükten bakmadan, okumayı sürdürürüm.	1	2	3	4	5
28. Konuşma sırasında karşımdakinin söyleyeceği bir sonraki cümleyi tahmin etmeye çalışırım.	1	2	3	4	5
29. Herhangi bir kelimeyi hatırlayamadığımda, aynı anlamı taşıyan başka bir kelime ya da ifade kullanırım.	1	2	3	4	5

BÖLÜM D:

30. İngilizce'mi kullanmak için her fırsatı değerlendiririm.	1	2	3	4	5
31. Yaptığım yanlışların farkına varır ve bunlardan daha doğru İngilizce kullanmak için faydalanırım.	1	2	3	4	5
32. İngilizce konuşan bir kişi duyduğumda dikkatimi ona veririm.	1	2	3	4	5
33. "İngilizce'yi daha iyi nasıl öğrenirim? " sorusunun yanıtını araştırırım.	1	2	3	4	5
34. İngilizce çalışmaya yeterli zaman ayırmak için zamanımı planlarım.	1	2	3	4	5
35. İngilizce konuşabileceğim kişilerle tanışmak için fırsat kollarım.	1	2	3	4	5
36. İngilizce okumak için, elimden geldiği kadar fırsat yaratırım.	1	2	3	4	5
37. İngilizce'de becerilerimi nasıl geliştireceğim konusunda hedeflerim var.	1	2	3	4	5
38. İngilizce'mi ne kadar ilerlettiğimi değerlendiririm.	1	2	3	4	5

BÖLÜM E:

39. İngilizce'mi kullanırken tedirgin ve kaygılı olduğum anlar rahatlamaya çalışırım.	1	2	3	4	5
40. Yanlış yaparım diye kaygılandığımda bile İngilizce konuşmaya gayret ederim.	1	2	3	4	5
41. İngilizce'de başarılı olduğum zamanlar kendimi ödüllendiririm.	1	2	3	4	5
42. İngilizce çalışırken ya da kullanırken gergin ve kaygılı isem, bunun farkına varırım.	1	2	3	4	5
43. Dil öğrenirken yaşadığım duyguları bir yere yazarım.	1	2	3	4	5
44. İngilizce çalışırken nasıl ya da neler hissettiğimi başka birine anlatırım.	1	2	3	4	5

BÖLÜM F:

45. Herhangi bir şeyi anlamadığımda, karşımdaki kişiden daha yavaş konuşmasını ya da söylediklerini tekrar etmesini isterim.	1	2	3	4	5
46. Konuşurken karşımdakinin yanlışlarımı düzeltmesini isterim.	1	2	3	4	5
47. Okulda arkadaşlarımla İngilizce konuşurum.	1	2	3	4	5
48. İhtiyaç duyduğumda İngilizce konuşan kişilerden yardım isterim.	1	2	3	4	5
49. Derste İngilizce sorular sormaya gayret ederim.	1	2	3	4	5
50. İngilizce konuşanların kültürü hakkında bilgi edinmeye çalışırım.	1	2	3	4	5

APPENDIX B: Öğrenci Geri Bildirim Formu: Teknoloji Kullanımı ve Stratejileri

Sayın katılımcı
Yapılan bu çalışma sizin İngilizceyi bilgisayar kullanırken İngilizceyi nasıl ne kadar öğrendiğinizi ortaya koymayı amaçlamaktadır. Lütfen neler yaptığınızı aşağıdaki soruları örneklerle detaylandırarak yazınız.

1. İnternet ortamında en çok hangi web sitelerini ziyaret ediyorsunuz?
2. İnternet kullanırken İngilizce öğrenmenizi destekleyen kendinize özgü ne gibi strateji ve teknikler kullanıyorsunuz?

Katkılarınız için şimdiden teşekkür ederim.

İngilizce Öğretmeni
Sinem DERKUŞ

APPENDIX C: Öğretmen Geri Bildirim Formu

Sayın katılımcı

Mersin Üniversitesi Yabancı Diller Eğitimde yüksek lisans çalışmam kapsamında İlköğretim öğrencilerinin Teknoloji Tabanlı Dil Öğrenme Stratejilerini araştırmaktayım. Bu doğrultuda siz uzmanların da görüşlerine başvurulmaktadır. Öğrencilerinizin teknoloji kullanırken başvurdukları kendilerine özgü stratejilerine yönelik gözlem ve deneyimlerinizi lütfen kısaca açıklayınız. Katkılarınız için teşekkür ederim.

İngilizce Öğretmeni
Sinem DERKUŞ

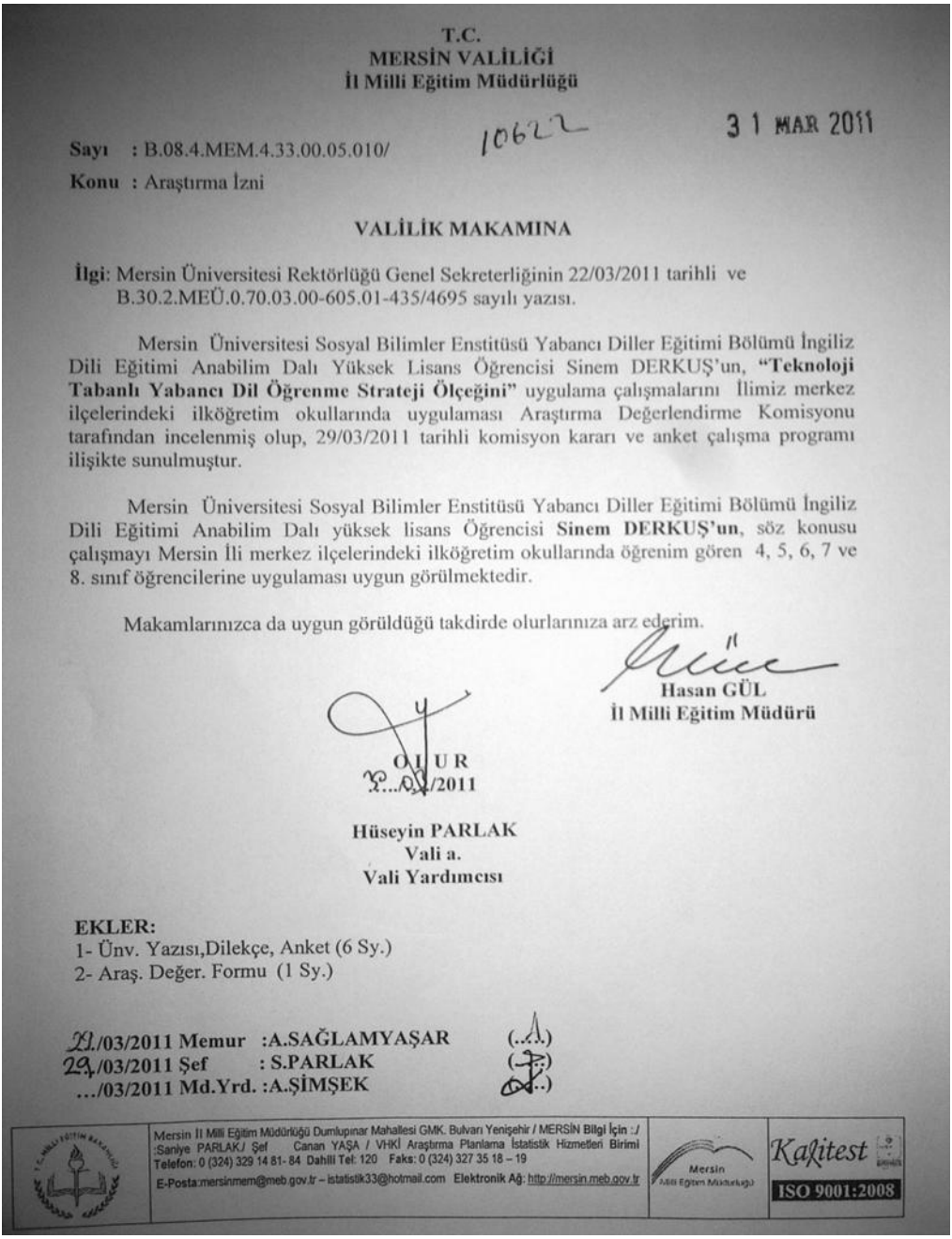
APPENDIX D: The Most Frequently Used Websites By Primary Students

1. FACEBOOK
2. Kral oyun
3. Oyunlar 1
4. Play hah
5. Google çevir
6. Anında çevir.com
7. My story maker
8. Online kitaplar
9. Mingoville
10. Club penguin
11. Xl sitesi
12. Twitter
13. Zargan
14. Oyun gemisi
15. Oyun skor
16. Bubble struggle 2
17. Wikipedia
18. Çilek oyun
19. Sesli sözlük
20. Hotmail
21. msn
22. ling sitesi?
23. Yahoo
24. Sorumatik.com
25. Knight online
26. Assasın's greed brotherhood
27. Punescafe
28. Hobbo
29. Moparscape
30. Bendes
31. Online soccer games
32. Didi games
33. Youtube

34. Dailymotion
35. Google maps
36. Google images
37. ikariam.net
38. izlesene.com
39. google videos
40. esl games
41. online tests
42. online exercises
43. g mail
44. fifa
45. call of duty
46. counter strike
47. videotube
48. ateş ve su.org
49. atli karıncam.com
50. vikipedi
51. blogspot
52. flonga.com
53. wolfteam
54. it girl
55. sims
56. araba oyunları
57. google earth
58. google maps
59. wwe
60. S4 league
61. Allads
62. Free realms
63. Team fortress 2
64. Sanalika
65. Darkorbit
66. Gta san andreas?
67. Arcadeprehacks.com
68. Silroad online

69. Twister
70. Multi theft tr forum
71. Yoville
72. Hidden object
73. Ttnet vitamin
74. Google
75. Netcarshow
76. Skype
77. Playchess
78. Friv.com
79. 52 dilde tercüme.com
80. Ligtv.com
81. Fanatik

APPENDIX E: İl Milli Eğitim Müdürlüğü Araştırma İzni Yazısı



T.C.
MERSİN VALİLİĞİ
İl Milli Eğitim Müdürlüğü

Sayı : B.08.4.MEM.4.33.00.05.010/ 10622 — 31 MAR 2011

Konu : Araştırma İzni

VALİLİK MAKAMINA

İlgi: Mersin Üniversitesi Rektörlüğü Genel Sekreterliğinin 22/03/2011 tarihli ve B.30.2.MEÜ.0.70.03.00-605.01-435/4695 sayılı yazısı.

Mersin Üniversitesi Sosyal Bilimler Enstitüsü Yabancı Diller Eğitimi Bölümü İngiliz Dili Eğitimi Anabilim Dalı Yüksek Lisans Öğrencisi Sinem DERKUŞ'un, **"Teknoloji Tabanlı Yabancı Dil Öğrenme Strateji Ölçeğini"** uygulama çalışmalarını İlimiz merkez ilçelerindeki ilköğretim okullarında uygulaması Araştırma Değerlendirme Komisyonu tarafından incelenmiş olup, 29/03/2011 tarihli komisyon kararı ve anket çalışma programı ilişikte sunulmuştur.

Mersin Üniversitesi Sosyal Bilimler Enstitüsü Yabancı Diller Eğitimi Bölümü İngiliz Dili Eğitimi Anabilim Dalı yüksek lisans Öğrencisi **Sinem DERKUŞ'un**, söz konusu çalışmayı Mersin İli merkez ilçelerindeki ilköğretim okullarında öğrenim gören 4, 5, 6, 7 ve 8. sınıf öğrencilerine uygulaması uygun görülmektedir.

Makamlarınızca da uygun görüldüğü takdirde olurlarınıza arz ederim.

Hasan GÜL
İl Milli Eğitim Müdürü

OLUR
30/03/2011

Hüseyin PARLAK
Vali a.
Vali Yardımcısı

EKLER:
1- Ünv. Yazısı,Dilekçe, Anket (6 Sy.)
2- Araş. Değer. Formu (1 Sy.)

29/03/2011 Memur :A.SAĞLAMYAŞAR
29/03/2011 Şef : S.PARLAK
.../03/2011 Md.Yrd. :A.ŞİMŞEK

Mersin İl Milli Eğitim Müdürlüğü Dumlupınar Mahallesi GMK. Bulvarı Yenişehir / MERSİN Bilgi İçin :/ :Saniye PARLAK/ Şef Canan YAŞA / VHKİ Araştırma Planlama İstatistik Hizmetleri Birimi
Telefon: 0 (324) 329 14 81- 84 Dahili Tel: 120 Faks: 0 (324) 327 35 18 – 19
E-Posta:mersinmem@meb.gov.tr – istatistik33@hotmail.com Elektronik Ağ: http://mersin.meb.gov.tr

Mersin İl Milli Eğitim Müdürlüğü

Kalitest ISO 9001:2008

APPENDIX F: Technology Integrated Language Learning Strategies Questionnaire (TILLSQ)

Sevgili Öğrenciler,

Aşağıda, sizin günlük yaşantınızda ve/ya okulda teknoloji aracılığıyla İngilizce öğreniminizle ilgili 74 ifade yer almaktadır. Sizlerden istenilen bu durumların sizin için ne derecede doğru olduğunu derecelemenizdir. Lütfen bu ifadeleri dikkatlice okuyarak sizin için ne kadar doğru olduğunu düşünün ve beş seçenekten sadece bir maddenin önünde bulunan boşluğa (X) işaretini koyunuz. Lütfen hiçbir maddeyi boş bırakmayınız.

Ölçeğe katılan öğrencilerin hiçbir kişisel bilgisi istenmemektedir. Bu çalışma bilimsel amaçlar için yürütülmekte olup ölçek yanıtları gizli tutulacak ve tamamıyla araştırma amaçlı kullanılacaktır. Katkılarınız için teşekkür ederim.

	Her zaman	**Sık sık**	**Bazen**	**Nadiren**	**Hiçbir zaman**
1. Internette İngilizce bilmediğim bir kelime gördüğümde anlamını yine internetteki online sözlüklerden araştırırım.					
2. Internette İngilizce yeni bir kelime gördüğümde anlamını cümleden çıkarmaya çalışırım.					
3. Sosyal paylaşım sitelerinin dil ayarını değiştirerek (facebook, twitter vs.) İngilizce olarak kullanırım.					
4. Sosyal paylaşım sitelerinde (facebook, twitter vs.) karşılaştığım İngilizce videoları izlerim.					
5. Sosyal paylaşım sitelerinde (facebook, twitter vs.) karşılaştığım İngilizce videoları paylaşırım.					
6. Oyun oynarken, özellikle İngilizce olanları oynamaya çalışırım.					

7.	İnternette yabancılarla sohbet ederken kamerayı / mikrofunu açıp İngilizce konuşmayı denerim.					
8.	İnternette yabancılarla sohbet ederken yazarak sohbet etmeyi tercih ederim.					
9.	"Msn'de" ingilizce sohbetleri ben başlatırım.					
10.	Internetten altyazısız İngilizce filmler / diziler izleyerek ne demek istediğini anlamaya çalışırım.					
11.	Internetten İngilizce filmler izlerken Türkçe altyazılı izlerim.					
12.	İzlediğim videolardaki anadili İngilizce olan kişiler gibi konuşmaya çalışırım.					
13.	Bilgisayarımdaki "Word, not defteri" gibi yazma programlarında İngilizce günlük tutarım.					
14.	Bilgisayarımda, internette sörf yaparken karşılaştığım, anlamını yeni öğrendiğim İngilizce kelimeleri bilgisayarımda bir dosyaya not ederim.					
15.	İnternette karşılaştığım videolardaki İngilizce konuşmaları anlamadığımda hepsini tekrar dinlerim.					
16.	İnternette karşılaştığım videolarda İngilizce konuşmaları anlamadığımda, anlamadığım yere geri dönüp sadece anlamadığım yeri tekrar dinlerim.					
17.	İnternette karşılaştığım videolarda İngilizce konuşmaları anlamadığımda, anlamadığım yeri dondurup anlamını internetteki başka programlardan, sözlüklerden araştırırım.					

	Her zaman	Sık sık	Bazen	Nadiren	Hiçbir zaman
18. Bilgisayarımın masaüstünde, bilmediğim kelimelerin anlamına bakmak için İngilizce-Türkçe / Türkçe-İngilizce sözlük bulundururum.					
19. Bilmediğim kelimelerin anlamını evdeki sözlüklerden bakmaktansa internetteki online sözlüklerden bakmayı tercih ederim.					
20. İnternet kullanırken İngilizceyle karşılaştığımda yaşadığım duygularımı bir yere yazarım.					
21. İnternet kullanırken İngilizce'de başarılı olduğum zaman kendimi ödüllendiririm.					
22. Internetteki arama motorlarından İngilizceyi daha iyi nasıl öğrenebileceğimi araştırırım.					
23. Bloglarda/forumlarda İngilizceyi daha iyi öğrenmek adına İngilizce tartışmalara katılırım.					
24. Cep telefonumdan internete girip İngilizce yazışmalar yaparım.					
25. Cep telefonumun dilini İngilizce olarak kullanırım.					
26. Facebook, twitter veya mail gibi teknolojik programlarda İngilizce ileti yazarım.					

27.	Microsoft Word'de İngilizce kompozisyon veya yazı yazarken yazım hatalarımı düzeltmek için İngilizce sözlükle denetletirim.					
28.	Bilgisayarımda oluşturduğum dosyalarımın adını İngilizce koyarım.					
29.	İngilizce dersiyle ilgili kaynakların bulunduğu siteleri kullanırım.					
30.	İngilizce kaynakların bulunduğu siteleri sık kullanılanlar listeme eklerim.					
31.	İnternette karşılaştığım bir İngilizce cümleyi kelimesi kelimesine Türkçe'ye çevirmeye çalışmam.					
32.	İnternette sohbet ederken, İngilizce bir şey söyledikten sonra karşımdakinin anlayıp anlamadığını birkaç soruyla anlamaya çalışırım.					
33.	İngilizce öğrenirken interaktif programlardan yararlanırım.					
34.	İnternette İngilizce bilgimi değerlendirebileceğim test veya sınavları çözerek seviyemi öğrenmeye çalışırım.					
35.	İngilizce proje ödevlerimi bilgisayarımdaki Word programında hazırlarım.					
36.	İngilizce proje ödevlerimi bilgisayarımdaki Powerpoint aracılığıyla hazırlarım.					
37.	İnternette, İngilizce ödevlerimle ilgili konuları araştırırım.					

38. Okunuşunu bilmediğim İngilizce kelimeleri sesli sözlüklerden dinlerim.					
39. Bilmediğim kelimelerin anlamını arama motorlarında araştırırım.					
40. Dinlediğim İngilizce şarkılardaki bilmediğim cümleleri arama motorlarında hemen çeviri kullanarak anlamaya çalışırım.					
41. Bilmediğim bir kelimeyi araştırırken yazılışını da bilmediğim için kopyala yapıştır yöntemiyle anlamını araştırırım.					
42. Bilmediğim kelimelerin anlamını arama motorlarına yazarak görsel resimlerde arayıp ne olduğunu öğrenirim.					
43. İnternette İngilizce şarkılar dinlerim.					
44. İnternette İngilizce şarkıları, sözlerini açarak dinlerim.					
45. Dinlediğim İngilizce şarkıların sözlerini indirip Türkçeye çeviririm.					
46. Oyun oynarken dil seçeneğinden İngilizceyi seçerek oyun oynarım.					
47. İnternette derste öğrendiğimiz İngilizce konularla ilgili testler çözerim.					
48. İngilizce elektronik-kitaplar okurum.					
49. Dünyadaki güncel haberleri yabancı gazetelerden okurum.					
50. İnternette sörf yaparken karşılaştığım İngilizce linkleri tıklayarak araştırırım.					
51. Sevdiğim çizgi filmleri İngilizce olarak izlerim.					
52. Oyun oynarken birçok İngilizce kelime öğrenirim.					

53. İnternette İngilizce oyunları oynamayı tercih ederim.					
54. Çeşitli programlarda İngilizce yazışırken ve/ya sohbet ederken karşımdakinin yanlışlarımı düzeltmesini isterim.					
55. Bilgisayar ve internet gibi teknolojileri kullanmak İngilizce bilgimi arttırır.					
56. Paint, Power point ve Word gibi programları İngilizce olarak kullanırım.					
57. Microsoft programlarını kullanırken araç çubuklarındaki kavramların İngilizcesini öğrenirim.					
58. İnternetteki İngilizce online kitapları telefonuma yükleyerek dinlerim.					
59. İnternetteki İngilizce müzikleri telefonuma yükleyerek tekrar dinlerim.					
60. İnternetteki İngilizce videoları telefonuma yükleyerek tekrar izlerim.					
61. İnternet kullanırken öğrendiğim İngilizceyle ilgili bir bilgiyi daha önce bildiklerimle eşleştirip anlamlandırırım.					
62. İnternetten öğrendiğim İngilizce bir bilgiyi kendi kendime tekrar ederek aklımda tutmaya çalışırım.					
63. Ancak İngilizce dersinde kuralları ve kalıbı öğretilen bir yapıyı internette gördüğümde daha iyi anlarım.					
64. İngilizce bir kelimeyi internette ilk gördüğüm ya da duyduğum haliyle (resimle, sayfadaki yeriyle vs.) hatırlarım.					
65. İnternette sohbet odalarında İngilizce sohbet ederken okulda İngilizce dersinde					

öğrendiğimiz dilbilgisi yapılarını kullanmaya çalışırım.					
66. İnternette öğrendiğim İngilizce bir kelime veya yapıyı okuldaki İngilizce dersinde kullanmaya çalışırım.					
67. İngilizce bir video veya müzik dinlerken aynı sesletimi yapabilmek ve kalıbı öğrenmek için kendi kendime o cümleyi tekrarlarım.					
68. İngilizce araştırma ödevlerini internetteki online veritabanlarını araştırarak yaparım.					
69. İnternette İngilizce bir konuşma veya şarkıyı dinlerken insanların yaptıkları dilbilgisi hatalarının farkına varırım.					
70. İnternette İngilizce olarak sohbet ederken (yazarken veya konuşurken) karşımdaki kişi ne demek istediğimi anlamadığında, aynı cümleyi tekrar söylerim / yazarım.					
71. İnternette İngilizce olarak sohbet ederken karşımdaki kişi ne demek istediğimi anlamadığında, aynı cümleyi farklı şekilde yazarım.					
72. İnternette İngilizce olarak sohbet ederken karşımdaki kişi ne demek istediğimi anlamadığında, sadece vurgulamak istediğim yeri yazarım.					
73. İnternette İngilizce bir sohbet yaparken söylemek istediklerimi daha iyi nasıl ifade edebileceğimi düşünürüm.					
74. İnternette İngilizcemi geliştirebilecek her türlü fırsatları değerlendirmeye çalışırım.					

APPENDIX G:Scale of Technology Integrated Language Learning Strategies

TEKNOLOJİ TABANLI YABANCI DİL ÖĞRENME STRATEJİLERİ ÖLÇEĞİ

Cinsiyet: K / E

Sınıf:

Sevgili Öğrenciler,

Aşağıda, sizin günlük yaşantınızda ve/ya okulda teknoloji aracılığıyla İngilizce öğreniminizle ilgili 21 ifade yer almaktadır. Sizlerden istenilen bu durumların sizin için ne kadar doğru olduğunu derecelemenizdir.Lütfen bu ifadeleri dikkatlice okuyarak sizin için ne kadar doğru olduğunu düşünün ve beş seçenekten sadece bir maddenin önünde bulunan boşluğa (X) işaretini koyunuz. Lütfen hiçbir maddeyi boş bırakmayınız.

Ölçeğe katılan öğrencilerin hiçbir kişisel bilgisi istenmemektedir. Bu çalışma bilimsel amaçlar için yürütülmekte olup ölçek yanıtları gizli tutulacak ve tamamıyla araştırma amaçlı kullanılacaktır. Katkılarınız için teşekkür ederim.

İFADELER	Her zaman	Sık sık	Bazen	Nadiren	Hiçbir zaman
1. İzlediğim videolardaki anadili İngilizce olan kişiler gibi konuşmaya çalışırım.					
2. Bilgisayarımdaki "Word, not defteri" gibi yazma programlarında İngilizce günlük tutarım.					
3. Oyun oynarken, özellikle İngilizce olanları oynamaya çalışırım.					

4. Bilmediğim kelimelerin anlamını evdeki sözlüklerden bakmaktansa internetteki online sözlüklerden bakmayı tercih ederim.					
5. İnternet kullanırken İngilizceyle karşılaştığımda yaşadığım duygularımı bir yere yazarım.					
6. Cep telefonumdan internete girip İngilizce yazışmalar yaparım.					
7. Bloglarda/forumlarda İngilizceyi daha iyi öğrenmek adına İngilizce tartışmalara katılırım.					
8. Bilmediğim bir kelimeyi araştırırken yazılışını da bilmediğim için kopyala yapıştır yöntemiyle anlamını araştırırım.					
9. İngilizce proje ödevlerimi bilgisayarımdaki Powerpoint aracılığıyla hazırlarım.					
10. Oyun oynarken dil seçeneğinden İngilizceyi seçerek oyun oynarım.					
11. İngilizce bir video veya müzik dinlerken aynı sesletimi yapabilmek ve kalıbı öğrenmek için kendi kendime o cümleyi tekrarlarım.					
12. İngilizce elektronik-kitaplar okurum.					
13. İnternetten öğrendiğim İngilizce bir bilgiyi kendi kendime tekrar ederek aklımda tutmaya çalışırım.					
14. Oyun oynarken birçok İngilizce kelime öğrenirim.					

15. İnternette İngilizce bir konuşma veya şarkıyı dinlerken insanların yaptıkları dilbilgisi hatalarının farkına varırım.					
16. Dünyadaki güncel haberleri yabancı gazetelerden okurum.					
17. İnternette İngilizce oyunları oynamayı tercih ederim.					
18. İnternette İngilizce olarak sohbet ederken karşımdaki kişi ne demek istediğimi anlamadığında, aynı cümleyi farklı şekilde yazarım.					
19. İngilizce proje ödevlerimi bilgisayarımdaki Word programında hazırlarım.					
20. İnternette sohbet odalarında İngilizce sohbet ederken okulda İngilizce dersinde öğrendiğimiz dilbilgisi yapılarını kullanmaya çalışırım.					
21. İngilizce bir kelimeyi internette ilk gördüğüm ya da duyduğum haliyle (resimle, sayfadaki yeriyle vs.) hatırlarım.					

ÖZGEÇMİŞ

Sinem Derkuş Güngör 02.05.1985 tarihinde Mersin'de doğdu. MTSO Anadolu Lisesi'ni bitirdikten sonra Çukurova Üniversitesi'nden Mersin Üniversitesi'ne yatay geçiş yaparak İngilizce Öğretmenliği'nden 2008 yılında mezun oldu. 2008'den bu yana, Ted Mersin Koleji'nde İngilizce öğretmeni olarak görev yapmaktadır. 2009 yılında başladığı yüksek lisansı eğitimi süresince, dil öğrenme stratejileri, belleksel kelime ve teknoloji temelli yabancı dil öğrenimi konuları ilgi alanı olmuştur ve bu konular üzerine çeşitli araştırmalar yapmıştır.