T.C.
UFUK UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT
ENGLISH LANGUAGE TEACHING PROGRAMME

IMPLEMENTATION OF SAMR MODEL IN ELT: AN ANALYSIS OF STUDENTS' ATTITUDES, PERCEPTIONS, ACCEPTANCE OF TECHNOLOGY AND ACHIEVEMENT IN THE PROCESS

MASTER'S THESIS

MERVE AYDIN

SUPERVISOR
PROF. DR. MELTEM HURİ BATURAY

ANKARA
2021

T.C.
UFUK UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT
ENGLISH LANGUAGE TEACHING PROGRAMME

IMPLEMENTATION OF SAMR MODEL IN ELT: AN ANALYSIS OF STUDENTS' ATTITUDES, PERCEPTIONS, ACCEPTANCE OF TECHNOLOGY AND ACHIEVEMENT IN THE PROCESS

MASTER'S THESIS

MERVE AYDIN

SUPERVISOR
PROF. DR. MELTEM HURİ BATURAY

ANKARA
2021

BİLDİRİM

Hazırladığım tezin/raporun tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kâğıt ve elektronik kopyalarının Ufuk Üniversitesi Sosyal Bilimler Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

† Tezimin 6 ay süreyle erişime açılmasını istemiyorum. Bu sürenin sonunda uzatma için başvuruda bulunmadığım takdirde, tezimin tamamı her yerden erişime açılabilir

29.06.2021
Merve AYDIN

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincere gratitude to my thesis supervisor Prof. Dr. Meltem Huri BATURAY for her continuous support, motivation, and enthusiasm. Her guidance helped me throughout this tough period. I could not have imagined having a better advisor and mentor for my MA study.

Besides my advisor, I would like to thank my thesis committee members Prof. Dr. Mehmet DEMİREZEN and Asst. Prof. Dr. Ceyhun KARABIYIK for their encouragement, insightful comments, and questions. They were incredibly supportive.

I would like to acknowledge Atilim University for permitting data collection for my study.

I also would like to thank to Ufuk University Graduate School of Social Sciences student affairs personnel, who are always eager to help.

Finally, my sincere thanks go to my dearest family, my mother, father and particularly my sisters Müge and Rana who have always been by my side and encouraged me whenever I needed.

This thesis was supported by TÜBİTAK-2211/ A General Domestic Graduate Scholarship Program.

ÖZ

AYDIN, Merve. İngilizce Dili Eğitiminde SAMR Modeli Uygulaması: Öğrencilerin Teknolojiye Karşı Tutum, Görüş, Kabulleri ve Süreçte Başarıları.

Bu çalışma, SAMR modelini İngilizce derslerine entegre etme ile öğrencilerin dijital okuryazarlık düzeyleri, mobil öğrenme araçlarını kabul etme düzeyleri, derslerde teknoloji kullanımına yönelik tutumları arasındaki ilişkiyi özel bir üniversite ortamında incelemeyi amaçlamaktadır. Bu bağlamda, tek grup ön test, son test tasarım uygulanmıştır. Karma yöntem kullanılarak dijital okuryazarlık ölçeği, mobil öğrenme araçları kabul ölçeği, öğrencilerin derste teknoloji kullanımına yönelik tutumları ölçeği veri toplama işlemi için ön test ve son test olarak uygulanmıştır. Uygulama süresi boyunca her hafta bir etkinlik gerçekleştirilmiş ve öğrencilere etkinliği nasıl buldukları konusundaki görüşleri sorulmuştur. Demografik verilerin toplanması için öğrencilerin doğum yılı, cinsiyetleri ve mezun oldukları lise bilgileri sorulmuştur. Çalışma, Atılım Üniversitesi Yabancı Diller Yüksekokulu'nda, 17 yükseköğretim öğrencisi ile gerçekleştirildi. Bulgular, SAMR modelinin dil derslerine entegre edilmesinin öğrencilerde dijital okuryazarlık düzeyleri konusunda farkındalık yarattığını ortaya koymuştur. Mobil öğrenme kabul ölçeği sonucunun SAMR Modeli ile anlamlı bir ilişkisi olmadığı ortaya çıktı. Ayrıca SAMR Modelinin sınıflarda teknoloji kullanımına yönelik tutumları değiştirmediği görüldü. Bunun yanı sıra, SAMR Modelinin dönüşüm seviyesi olarak da adlandırılan ilk iki adımı, geliştirme seviyesi olarak adlandırılan son iki adımına göre öğrencilerin İngilizceyi anlamasına ve kullanmasına daha az yardımcı olduğu görülmüştür. Öğrencilerin etkinliklere ilişkin genel değerlendirmesi, Yerine Koyma ve Artırma düzeyinde, Değiştirme ve Yeniden Tanımlama düzeyine göre daha az olumludur. Ancak, faaliyetlerin başarı puanları düzenli bir örüntü izlememiştir.

Anahtar Sözcükler: SAMR Modeli, Dijital Okuryazarlık, Sınıfta teknoloji kullanımına yönelik tutumlar, Mobil Öğrenmenin kabulü

ABSTRACT

AYDIN, Merve. Implementation of Samr Model in Elt: An Analysis of Students' Attitudes, Perceptions, Acceptance of Technology and Achievement in The Process, Master's Thesis, Ankara, 2021.

This study aims to investigate the relationship between the SAMR model in the English language classes and students' digital literacy levels, their acceptance of mobile learning tools, their attitude towards the use of technology in the lessons in a private university setting. In this respect, one group pre-test, post-test design was implemented. Mixed methods were used with three Likert-scales, Digital literacy scale, Mobile learning tools acceptance scale, Students' attitudes towards technology use in the lesson were administered as pre-test and post-test for the data collection procedure. During the implementation of the SAMR model, one activity that is suitable for a particular level of the model was conducted each week, and students were asked about their opinions on how they found the activity. In order to gather demographic data, students' year of birth, gender and high school they graduated from were asked. The study was conducted at Atilim University School of Foreign Languages, School of Foreign Languages, with a sample of 17 tertiary level students, both female and male. The findings revealed that integrating the SAMR model in the language lessons raised awareness of the students' digital literacy levels. The result of the mobile learning acceptance scale revealed no significant relationship with the SAMR Model. Besides, the SAMR Model did not change the attitudes towards technology use in the classrooms. Moreover, it was seen that the first two levels, transformation phase, of SAMR Model helped students understand and use English less than the last two levels, enhancement phase. Students' overall evaluation of the activities were less positive in the Substitution and Augmentation level than Modification and Redefinition level. However, the achievement scores of the activities did not follow a regular pattern.

Keywords: SAMR Model, Digital Literacy, Attitudes towards technology use in the classroom, Mobile Learning acceptance

TABLE OF CONTENTS

Page Number:

LIST OF ABBREVIATIONS

SAMR: Substitution, Augmentation, Modification, Redefinition

ICT: Information and Communication Technology

EFL: English as a Foreign Language Learning

CALL: Computer Assisted Language Learning

ASR: Augmented Speech Recognition

AR: Augmented Reality

VR: Virtual Reality

CPD: Continuing Professional Development

HOTS: Higher order thinking skills

LIST OF TABLES

Page Number:

LIST OF FIGURES

Page Number:

CHAPTER 1

INTRODUCTION

This study aims to investigate the relationship between the SAMR model in the English language classes and students' digital literacy levels, their acceptance of mobile learning tools, their attitude towards the use of technology in the lessons in a private university setting. In chapter one background of the study, theoretical framework, the importance of the study and the research questions are presented. In chapter 2, educational technology, use of technology in language teaching and learning, how to integrate technology into English language teaching, SAMR model, attitudes towards the use of technology in education, acceptance of mobile learning technologies and digital literacy are explained. Chapter 3 gives information about the research design, participants, data collection instruments, data collection procedure and data analysis. Chapter 4 presents the results and the results are discussed in chapter 5. The study also provides pedagogical implications and suggestions for future research.

1.1.Background of the Study

Developments in the field of English language teaching and learning have always been hand in hand with the developments of technology. Computers became financially available for teachers in the mid-eighties (Dudeney & Hockly, 2009). The technological tools which are used to enhance the English teaching and learning process in and out of the classroom have always changed by the needs of the students and the teachers. Before computers and mobile technologies became commonly available and affordable, technology in teaching English was based on tools and techniques such as using television and video sources, language laboratories, cassettes, overhead projectors, etc. (Galloway, 2017). However, technology has been rapidly and significantly changing over the recent decades. As a result of these changes, the variety and accessibility of technology have increased in general. Teachers have more opportunities to use technology and their toolbox has expanded. In terms of hardware, computer devices have changed their forms by getting smaller and more mobile while in terms of software the internet connects these devices and connects students in the classroom, out of the school (Eady & Lockyer, 2013). All these developments have paved the way for a shift in classroom pedagogy and challenged the traditional understanding of teaching content knowledge (Donnelly & Kyei-Blankson, 2015).

The practical use of technology in the classroom is significant for numerous reasons. It prepares students for their roles in society, it has the potential of increasing motivation and engagement of learners, in addition, it caters to different learning styles (Eady & Lockyer, 2013). Offering a practical evaluation of classroom activities to enhance learning, the SAMR model of technology integration includes four levels which are from highest to lowest Redefinition, Modification, Augmentation, Substitution. This model was suggested by Puentedura (2006) to choose, utilize, and evaluate technology in education. According to him, the effects of technology integration in the classroom should be investigated to discover the success as well as the effect of such practical technology integration while teaching. The students' digital literacy levels, their level of acceptance for mobile learning, their attitudes towards the use of technology in the lessons may have an effect not only on how to integrate but also on what kind of technology to integrate into the lessons while teaching English. Besides, the students' perceptions of the tools and activities that are used should be taken into consideration while integrating technology into the classrooms and the curriculum.

1.2. Theoretical Framework

Worldwide governments, educational systems, researchers, school leaders, teachers, and parents consider technology as a crucial part of education (Eady & Lockyer, 2013). The word 'integration' in the field of education is often used to refer to integration of technology in teaching and learning. Eady and Lockyer (2013) asserted that the notion of integrating technology into the curriculum arose due to the concern that educators may have been teaching *about* technology and teaching *how to use it* without discussing how students can utilize technology-related knowledge and skills while studying. To overcome this problem, many technology integration models have been developed such as the SAMR model (Puentedura, 2006), Levels of Technology Integration (LoTi) Framework (Barron et al., 2003), and Technology Integration Matrix (Harmes et al., 2016). In this study, the SAMR model of technology integration is investigated, and it is aimed to find out its relationship with the level of digital literacy of the students, their attitudes of technology use in the lessons, and level of acceptance of mobile learning tools.

Puentedura (2006) proposed SAMR model to encourage teachers in applying and employing the latest technological devices and services in teaching and learning. This model is comprised of four successive levels which cover two basic phases: enhancement and transformation. In each phase, there are two levels. Substitution and augmentation levels are in the enhancement phase while modification and redefinition levels are in the transformation phase. At the first and second levels learning content stays the same (Substitution) and then slightly improved (Augmentation) by the technology, at the third and fourth levels the teacher utilizes technology to make adjustments in educational forms (Modification) or uses entirely new forms which could not be possible to implement without the technology (Redefinition). In other words, the tasks implemented and performed at the substitution level could be conducted without technology because there is no functional change in teaching and learning. At the augmentation level, students are more engaged in technology. However, technology offers merely slight functional improvement while acting as a direct substitute. At the modification level, technology is used for significant task redesign. At this level, new methods and tools are used, the audience is expanded, peer feedback is incorporated. The final level, redefinition, provides previously inconceivable and completely new tasks. At this level, collaboration and discussion are involved as in the previous level but the audience is expanded to the whole world.

1.3. Statement of the Problem

Developments in technology have also reconstructed the traditional way of teaching through hardcopy books, printed worksheets, and materials with e-books and online and/or soft copy documents. These developments also proved that only granting access to technology in the classroom is not enough. The development of technology-based knowledge and skills in a meaningful way is important for all students and teachers (Eady & Lockyer, 2013). The relevance of implementing information and communications technology (ICT) in the classroom was put forward by Schrock (2016) as “to transform learning experiences so they result in higher levels of achievement for students” (p.4). SAMR model offers enhancement and transformation of learning and teaching experience via implementation of technological tools at different levels. However, while implementing technology in the language classroom, it is crucial to consider students' digital literacy levels, their acceptance of mobile learning tools, their attitudes towards the use of technology in the lessons. In addition, during the implementation process, it is important to investigate their perceptions towards the tools used in the classroom to enhance their language learning.

Previous educational technology studies have focused primarily on knowledge and skills. However, attitudes, acceptance, and perceptions of the students towards technologies, tools and methods used should be evaluated because affective constructs such as attitude are important factors to affect an individual's learning and use of these technologies (Gardner, 1985). Therefore, the current study aims to investigate if technology integration from the view of SAMR model in English lessons makes a significant change on students' digital literacy levels, their acceptance of mobile learning tools, their attitude towards the use of technology in the lessons.

1.4. Purpose and Significance of the Study

The main purpose of this study is to carry out one group pre-test post-test design research on SAMR model of technology integration in an EFL classroom at tertiary level education. The pre-test and post-test aimed to determine the students' digital literacy levels, their acceptance of mobile learning tools, and their attitudes towards use of technology in the lessons. During the implementation of the SAMR model, which consists of four successive levels of integration of devices and services, students' perceptions for each activity at each level were asked. Overall, it is aimed to find out if the SAMR model of technology integration into English lessons creates a significant difference on students' digital literacy levels, their acceptance of mobile learning tools, and their attitudes towards use of technology in the lessons.

This study will provide insight into the field of technology integration, especially the SAMR model in terms of students' digital literacy levels, their acceptance of mobile learning tools, their attitudes towards use of technology in the lessons. There is no previous study on investigating the relationship between SAMR model and its effect on the digital literacy levels, acceptance of mobile learning tools and attitudes towards the use of technology in the lessons. Moreover, the context in which this study took place constitutes uniqueness for this study as the SAMR model of technology integration has not been studied neither in Turkish context nor at an English preparation school.

1.5. Research Questions

The research questions investigated in this study are:

a) Is there any significant difference between pre-test and post-test digital literacy scores of students?

b) Is there any significant difference between pre-test and post-test mobile learning acceptance scores of students?

c) Is there any significant difference between pre-test and post-test attitude towards technology scores of students?

d) Is there any significant difference in students' perceptions related to activities helping to understand and use English?

e) Is there any significant difference between students' overall evaluation related to activities?

f) Is there any significant difference between students' achievement scores regarding activities?

g) What are the perceptions of students regarding each activity?

1.6. Assumptions and Limitations of the Study

The main limitations of this study were the sample size and convenience sampling of the participants. The research was conducted with only one group of EFL students due to the working conditions and the scheduled program of the school. Therefore, the findings of the current study do not allow for generalizability. This research was conducted at a private university where all the students have access to tablets delivered by the school. The acceptance and attitudes of the students towards technology integration could have been affected by this situation. That is why a pre-test and post-test design was conducted to eliminate thoughts of the students before and after the implementation of the model. Another limitation is that this study focuses only on students' perceptions while other studies investigated both teachers' and educators' perspectives into consideration. Finally, there is limited research on this model to confirm or counter the findings presented in this study.

The main assumption of the study is that students' digital literacy levels, attitudes towards technology use in the lessons, and their acceptance of mobile learning tools would be affected positively after the implementation of SAMR model of technology integration. The students are also asked about their opinions of each activity used during the implementation of SAMR model levels. It was assumed that students would benefit more from technology in the last two levels, transformation phase, of the SAMR model because, in these levels, technology requires a significant task redesign. However, in the first two levels integration of technology does not allow for a significant task redesign and only replaces and substitutes traditional tools by digitalizing them. Therefore, students would benefit from the technological enhancement provided by the first two levels of the SAMR model in a limited way.

1.7. Definition of the Key Terms

SAMR Model: A model explaining how technology can be integrated into schools and how different tools can be used. The name is based on the acronym by the first letter of each of the four levels that describe the use of technology in the learning environment: Substitution, Augmentation, Modification, and Redefinition. It was created by Puendetura (2006),

It is divided into two phases: enhancement and transformation. The enhancement phase includes two levels: *Substitution* and *Augmentation*. The transformation phase includes two levels *Modification* and *Redefinition*.

Substitution: The integration of a digital tool with no functional change to the lesson.

Augmentation: Technology continues to replace traditional tools with digital ones. However, at this level, the digital tool offers some functional options.

Modification: Technology integration becomes transformative by requiring a redesign of the lesson around the digital tool.

Redefinition: Technology enables the creation of tasks, projects, or learning activities that could be impossible to create without it.

Educational technology: Creating, using, and managing appropriate technological processes and resources to implement and facilitate learning.

Digital literacy: The ability to use information and communication technologies in teaching and learning to reach, produce and share information.

Attitude: A mental way of thinking about something that is linked to believers and their willingness to engage in particular events.

Mobile learning: The intersection of e-learning and mobile computing in order to provide learning experiences without limitation of space and time.

CHAPTER 2

LITERATURE REVIEW

2.1. Educational Technology

The 1960s and 1970s are turning points in history in terms of digital technologies and the emergence of the internet. Since then, technology has started to affect almost every aspect of our daily lives and has become a vital part of it. Education is one of the areas which has been unavoidably affected by these developments (Nurkamto, 2020). Traditional instructional practices have been replaced and changed by these latest developments, resulting in the enrichment of traditional instructional practices. The field of using technology in education has received a great amount of attention in recent years (Mısırlı, 2016). The need for a definition for educational technology has emerged subsequently. Association for Educational Communications and Technology defined educational technology as: “the study and ethical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources” (Januszewski & Molenda, 2013, p. 333). Similarly, Huang et al. (2019) described educational technology as the use of tools, technologies, processes, procedures, resources, and strategies to enhance learning experiences in different settings such as formal vs. informal learning, non-formal learning, lifelong learning, learning on demand, workplace learning, and just-in-time learning. Huang et al. (2019) also put forward that educational technology approaches started with the early uses of educational technology tools and have expanded in the latest years. They include devices and approaches such as mobile technologies, virtual and augmented realities, simulations and immersive environments, collaborative learning, social networking, cloud computing, flipped classrooms, and more. Mısırlı (2016) states that technology integration was traditionally perceived as the presence of technology in the classrooms for the sake of using technology. However, the focus of technology integration into education should be on the teaching process, learning experiences, and curriculum. Therefore, according to Mısırlı (2016) technology integration into education should be defined as to teach a subject in the curriculum using technology as an instructional tool.

With the successful technology integration into the lessons, the teacher does not only think about the ways of using tools in the classroom but also how to improve learning and lessen the anticipated problems that may occur while implementing a technology integrated lesson plan (ISTE, 2007). While integrating technology into education, not only the level of technology use but also how and why to use technology should be taken into consideration (Harris, 2008). In other words, the quantity of the tools should not be the focus of integrating technology into education unless it reinforces teaching and learning. The main goal must always be to improve learning and teaching with the right method and strategy. For this reason, instead of the quantity, the quality of utilizing educational technologies should be considered as the main factor during the integration process.

In short, having become a fundamental part of human life, technology introduced various learning and teaching opportunities to the students and teachers. The necessity of reviewing the teaching methods for educators has arisen because of this inevitable change. This is crucially important if technology integration is to be purposeful and improve the quality of education.

2.2. Use of Technology in English Language Teaching and Learning

The field of English language teaching has always been dynamic and has been shaped by sociological, economical, technological changes.

The communicative language teaching methods have always attracted a great deal of interest. More than a hundred years ago native-speaking immigrant teachers in America imagined this and their ideas have been known by a variety of labels such as Natural Method, Conversation Method, Direct Method, Communicative Approach, and so on (Crystal, 1997). The classroom techniques associated with these methods have also changed over time. However, the underlying philosophy has always been the same: learning how to speak a language is an innate process for which people have a capacity if the proper conditions exist (Howatt, 1984).

By the twenties, the notion that English must be used for communicating gained importance, and in the fifties the distinction between ESL and EFL became widespread (Howatt, 1984).

Contributions of technical inventions should be highlighted to see how the developments affect the field of language learning and teaching. The first technical invention that is to be mentioned is the gramophone as it played a major role in language teaching for some time. Howatt (1984) stated that the arrival of long-playing records in the early fifties continued to be a solution for some of the problems in the language learning and teaching process. The tape recorders came to the stage in the mid-fifties and the use of the recording in class became practical. Language laboratories were developed where students could work together. They used two machines, one for listening and the other for personal recording (Howatt, 1984).

English by Radio was set up during the war. It transmitted short five-minute lessons in the 1930s (Howatt, 1984). The first *English by Radio* broadcast consisted of a series of selected utterances articulated slowly in a flawless way with BBC English of the day accent, followed by a careful translation in the language of the learner. The radio course *Calling All Beginners* started in the early 1950s and it aimed to teach English to beginners throughout the world with the help of a specially designed bilingual radio series accompanied by a book with records including the main dialogues and the teaching points presented in the learner's language as to enable self-study (Howse, 1976). Tomalin (1979) listed the uses of radio programs produced by the BBC. The information was gathered by asking ESL and EFL teachers around the world during conferences. The main reasons why *English by Radio* courses are beneficial are listed here;

"-It provided incidental listening; it is good to be exposed to language even though it is not easy enough to understand.

-It was used as homework so that the learners listened to the radio course and reported it in the classroom. For more advanced learners it provided discussion and debate.

-When students had difficulty with something, teachers encouraged them to write about it to the BBC. Later, they listened to each radio course carefully to hear their names on the radio.

-The weekly series created curiosity as they were mini soap operas for the learners of English. The learners were asked to guess what would happen next." (Tomalin, 1979, p. 69-72)

Audio-visual systems such as films were expensive and it was challenging to use at the schools at first, but later France attempted audio-visual courses at CREDIF (Howatt, 1984). MacKnight and McGovern (1983) reviewed the videos in the context of English language teaching in Britain. Off-air software was used with general interest students, businessmen, and engineers. MacKnight and McGovern (1983, p.5) also listed the functions which video material fulfill as "introduction to topic/stimulus of interest, information on cultural background, general language spin-off, consolidation of a known language, contextualization of a new language, identification and practice of language items, development of professional competence, the basis for project work, self-analysis of the professional task, development of social competence, self-analysis of the social task". MacKnight and McGovern (1983, p.7) also asserted the skills which video materials were used to develop as follows: "extensive listening, intensive listening, interpretation of non-verbal signals, oral production, student awareness of progress towards target language behavior, writing, extensive reading".

Before computers became commonly available and affordable, technology in teaching English was available in limited ways. Using television and video resources, language laborites, cassettes, and overhead projector, as well as photocopier, were some examples of technology use in English lessons. These tools have been employed for both preparation and teaching. These latest technological developments provided authentic language to language learners. Besides, learners had a chance to use English for communicative purposes (Galloway, 2017).

Computers became financially available for teachers in the mid-eighties (Dudeney & Hockly, 2009). Today, with the help of computer-assisted language learning (CALL), it is possible to create opportunities for learners to record their oral production to improve their speaking skills and pronunciation. In addition, they have opportunities to get feedback from native speakers, peers, instructors, and others. Furthermore, providing plenty of authentic language samples including specific vocabulary with the consideration of learners' lexical development, and practicing the target language extensively and in a meaningful way both in and out of the classroom with interlocutors supplying friendly and clear feedback are some of the benefits of computer and internet assisted learning (Dudeney &Hockly, 20019). Users of computer and internet assistant language learning methods feel engaged in language learning more when they receive unthreatening feedback from native or native-like interlocutors. The language is presented to them in an authentic context where they can increase their language awareness. This new way of worldwide participation while learning a foreign language presents teachers with limitless chances as well. Thanks to these developments teachers can develop meaningful and authentic language practice exercises for the learners (Kessler & Hubbard, 2017). The inevitable consequence of these developments for the learners is that such opportunities have a significant effect on learner motivation (Dörnyei, 2001). Owing to these developments, learners have opportunities to collaboratively construct knowledge and build communities which are helpful for them to develop autonomy over their learning (Reinders & Hubbard, 2013).

Another outstanding contribution of technology to the teaching and learning context is that it has increased the variety of learning contexts. That is, education was transferred dichotomously, either face-to-face or online. However, today, both learners and teachers have numerous options within both of these domains. In face-to-face contexts, active learning spaces that allow learner-centered practices, simulations of the target language, the culture of the target language can be embedded in the physical classroom through the augmented and virtual reality tools (Kessler, 2018). Kessler (2018) also puts forward that the variety of online contexts that support language teaching and learning is increasing as a direct result of the development of different informal social domains. In other words, authentic language practice is constantly available across the internet. As a result, individuals have a chance to engage with one another. This domain is beneficial for language learners as it provides the learners with the opportunity to observe the cultural and social context where language is used. Language learners can interact with real native people, and they can see how natives interact with each other. These domains include a variety of social media contexts such as Twitter, YouTube, Facebook, Reddit, gaming platforms, and collaborative-based projects. Each of these platforms comes with its own socio-cultural expectations and practices that lead learners to explore notions such as genre, register, and culturally acceptable interactions (Kessler, 2018). As a result, it is not surprising to find out that nowadays textbooks have changed their content and now they include formal and informal register training. It is a part of the curriculum to teach how to communicate on social media in English and it is easy to find materials on this topic. While writing in English on social media, learners need to consider their audience, form of the task, and task type. Tele-collaboration, also referred to as online interactions and exchanges, involves two groups of learners from geographically separate areas learning within a shared experience on social platforms (Greisamer, 2016). This type of chat-based activity has been found to boost cognitive processing skills while online discussion forums offer learners an opportunity to study and express themselves at greater length (Sotillo, 2000). Another use of media is mashups, which are combinations of various media forms allowing learners to express their creativity in a way that they keep willing to continue their participation. When using mashups, the learners make use of text and images that are used in memes, they may use YouTube videos of popular songs including text or images (Kessler, 2018).

Automated speech recognition (ASR) offers users the ability to use speech to interact with and control computers and other mobile devices. This tool provides an opportunity to practice speaking while getting automated spoken feedback. Voice-controlled trivia and adventure games for English language learners are engaging because learners can interact with the computer using the target language, and to achieve this they need to be clear and understandable (Incerti et al., 2017). This helps them with their pronunciation and speaking skills. The automated feedback they get from the tool may increase their awareness of their mistakes; it could be seen as a self-assessment tool for their speaking skill as well.

The latest technology that is embedded into language classrooms can be considered augmented reality (AR) and virtual reality (VR). Virtual reality tools allow learners to be transported to a museum such as the Louvre, where they can be encouraged to interact with others, also with the works of art and space itself. It is also possible to be immersed in a street market within a target language culture where the learners feel compelled to interact with salespeople (Kessler, 2018). It is possible to customize virtual reality landscapes to cater to the learners' unique individual needs, that is, it helps with differentiated learning.

Language is one of the important components that affect worldwide communication activities (Ahmadi, 2018). Students engage in English language skills such as listening, speaking, reading, and writing to increase their level of proficiency and communication (Grabe & Stoller, 2012). Becker (2000) stated that technology is regarded as a crucial instructional instrument for increasing proficiency levels and communication during the language learning process because it offers countless resources while learning languages. Ilter (2015) emphasized that teachers should encourage learners to find appropriate language activities using technological tools. Clements and Sarama (2003) stated that the use of suitable technological materials is important for learners because it does not only supply rapid information but also motivates learners to learn more. Larsen-Freeman and Anderson (2013) acknowledged that by using technology, numerous authentic materials have become available to language learners.

To sum up, the studies support that technology has several primary roles in language education. It is mainly used as an authentic resource, as a delivery system, and to enhance productivity (Bull & Ma, 2001). Computer programs seem to be efficient in supporting student-centered learning because technology can present scaffolding opportunities for students with special needs and interests, and it supports factual knowledge acquisition, and creates new learning experiences for students (Pedersen & Liu, 2003). The implementation and integration of technology in English language classes have considerably changed English teaching methods. It provides plenty of alternatives to make teaching more interesting and more productive in terms of advancement. In traditional classrooms, teachers were in front of learners and gave lectures, explained the notions, and instructed students by using a textbook, blackboard or whiteboard. These methods and approaches have changed with the development of technology as the lessons are more student-centered, the teacher is available for scaffolding rather than instructing. Technology also helps students communicate in real context instead of artificial non-practical contexts. As a result of all these advancements, students are more engaged, and they are more responsible for their language learning processes.

2.3. How to Integrate Technology into English Language Teaching

Various studies highlight how to use educational technologies to facilitate and augment learning. In the early 1990s, important insights regarding how we think about the use of any technology for learning were offered by various researchers. In the early studies, two main divisions were made "*learning from*" and "*learning with*" (Jonassesen & Reeves, 1996). The *learning from* perspective is grounded in a behaviorist view of learning, which proposes that information is conveyed from the medium and consumed by the learner (Hayes, 2000). In this model the learner is passive with rare and limited interaction while the teacher is the manager, managing pre established and often teacher-proof content. Technology is only used as a vehicle to deliver information (Kozma, 1994). *Learning with* technology is a perspective based on constructivist (Piaget, 1954) and constructionist (Harel & Paper, 1991; Ackermann, 1996) principles of teaching and learning. According to this perspective students are more deeply involved in learning if they are constructing something that their audience will see, critique and possibly use. They construct their own, unique meaning during the process. The learner's position is moved from being passive to an individual performing actively. The effectiveness of this model is the development of skills, and the experience learners have with it. The learner is no longer passively receiving information but contributing by designing and creating outputs that enable the learning process to progress (Perkins, 1986).

To simplify and guide the process of technology integration, several frameworks have been established so far. The necessity of frameworks stems from the nature of technology because mobile devices and their software are sophisticated, unstable, and opaque (Mishra & Koehler, 2008). This means, digital technologies are changing in a way which cannot be predictable, and can take many forms (Hamilton et al., 2016). Due to its fluidity and mobility, it is hard to keep up with the latest technology. However, the need for a framework to embed technology into the curriculum is necessary and the lessons make this dynamic process less sophisticated and more stable for educators. As to meet this necessity, it is vitally important to determine when and how to integrate technology accurately for an effective language learning process. That means, technology should not be integrated just for the sake of using technology.

The key factors determining the quality of language learning depend on some professional aspects such as lesson planning, understanding the learner, managing lessons, background field knowledge, organizing and employing suitable materials chosen from a variety of available resources, evaluating the entire process of learning and its results, performance evaluation of teachers for their professional development, using multilingual approaches, promoting 21st-century skills, and understanding education policies (Nurkamto, 2020). In addition to all these aspects, in today's fast-developing technology environment, integrating technology into the curriculum is considered to be one of the key factors that determine the quality of language learning (Nurkamto, 2020). The significance of integrating technology manifests itself via changing teaching and learning from both teachers' and learners' perspectives. Therefore, it plays a crucial role in curriculum implementation.

It is stated in the continuing professional development (CPD) framework for teachers that integrating technology must incorporate particular activities. These particular activities listed as "developing effective strategies for locating appropriate digital content, following guidelines for e-safety, evaluating the potential effectiveness and appropriacy of digital content, tools and platforms for achieving desired learning outcomes, using technology in the production of teaching and learning materials, setting up activities that support learning by exploiting appropriate digital content, tools and platforms, developing effective strategies for resolving potential technical issues, using technology for administrative tasks in accordance with data protection guidelines, promoting autonomous learning by exploiting digital content and technologies inside and outside of the formal learning environment, enabling collaborative and participatory learning by exploiting online communities, tools and platforms and reflecting on the effectiveness of ICT integration into the teaching and learning process" (British Council, 2015, p. 6-18). Besides, Nurkamto (2020) inserted that integrating technology into the curriculum is possible on two levels: at the product level and the process level. If a teacher plans lessons in which integration and support of technology are necessary and chooses the right technology which is the most suitable for the lesson's objectives, it is called "technology integration into the curriculum as a product". On the other hand, "technology integration into the curriculum as a process" is focused more on the given context of the lesson, which may differ from the assumed context. Here a teacher considers the unplanned technology needs of the learners during conducting a lesson.

Levy (2017), on the other hand, identifies five levels at which technology can support language teaching.

1. The *physical level,* hardware tools such as mobile phones, digital cameras, tablets, and laptops.

2. The *management level*, which includes learning management systems (LMSs) that provides opportunities such as the administration, delivery, tracking the students' process, and reports of a language course.

3. The *applications level*, consisting of word processing software, emailing and chatting applications, social-networking sites, and blogs.

4. The *resource level*, which means the access to online newspapers, magazines, language tutors, and dedicated websites for learners, which are called authentic materials.

5. The *component technology level*, such as spelling checkers, grammar checkers, electronic dictionaries, and other support tools.

Stanley (2013) reminds us that pedagogical aspects should be given more priority than technological aspects while integrating technology into the teaching and learning process. As a result, he listed several principles to bear in mind while integrating a technology;

1. Why is the technology used in the lessons? Technology ought to be used because of the confidence it grants to the teacher and the student. It should be used as long as it improves student learning, not just for the sake of using technology.

2. Who is the technology best for? Technology ought to be used when it is relevant for the learners. The needs of the students must be taken into consideration while opting for technology use in the lesson.

3. What is the technology best used for? Every lesson has got its learning objectives and technology ought to be used so long as it suits the learning objectives.

4. Where should the technology be used? Technology ought to be used when the classroom is connected to the internet. The physical conditions and hardware opportunities must be checked before deciding on which technology to use.

5. When should the technology be used? Technology ought to be used when it is the best moment in the given context. This would decrease both overuse and underuse of technology.

6. How should the technology be used? It ought to enable the use of classroom time and the lesson more efficiently.

These features of digital technologies make the integration process complex. Therefore, some standardization of technology integration helps both learners and educators to have a fruitful experience of technology use in the classrooms. With the help of the predetermined frameworks on integration of technology in the lessons, it is possible to enhance and transform the learning process. One of these frameworks that enable us to decide how and why to use technology in the lessons is the SAMR model. The aim of this model was described by Romrell et at. (2014, p.4) as it intends "to encourage educators to significantly enhance the quality of education provided via technology". In addition, Schrock (2013) also states that SAMR is a model that supports and enables teachers to create, implement digital tools while teaching. While designing, creating, and implementing technology-based learning activities and utilizing tools and applications, this model helps educators to improve the learning environment (Lobo & Jimenes, 2017).

2.4. The Substitution, Augmentation, Modification, Redefinition (SAMR) Model

Puentedura (2006) designed the SAMR model, indicated in Figure 1, for technology integration in educational settings. It helps to choose, utilize and evaluate the level of technology used in education. The letters of SAMR stand for, from lowest to highest, the levels; *Substitution, Augmentation, Modification, and Redefinition* (Rowe, 2014). These levels are divided into two phases: *Enhancement* and *Transformation*. The model is intended to be used to evaluate classroom activities to enhance students' learning outcomes (Lobo & Jimenes, 2017).

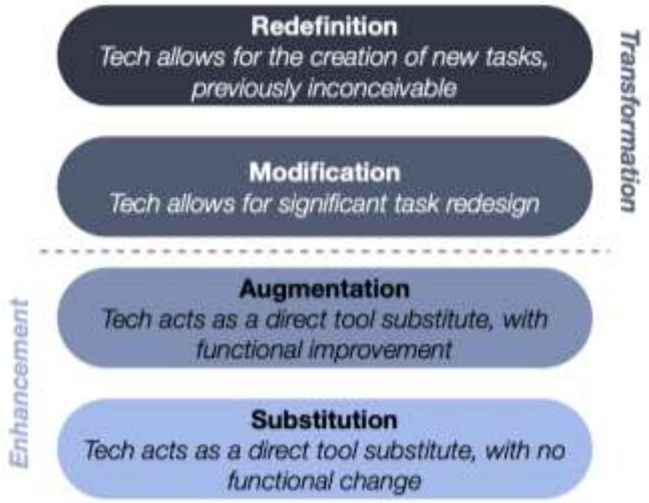


Figure 1. The SAMR Model of Technology Integration

Source: Puentedura (2006), *Transformation, technology, and education*. http://hippasus.com/resources/tte/puentedura_tte.pdf

Puentedura (2006) asserts that in his model, the use of technology proceeds from enhancing the learning experience to transforming it. The model enables the classification of the cognitive levels applied in each learning activity, which matches a specific level in the framework with a form of a ladder. Consequently, as shown in Figure 2, the first two levels of the framework *substitution, augmentation* are paired with the lower level of Bloom's revised taxonomy, which is *Remembering, Understanding, and Applying* while the levels of *modification and redefinition* are affiliated with Bloom's higher levels; *Analyzing, Evaluating and Creating*. Pairing the SAMR model with Bloom's revised taxonomy has several outcomes such as familiarity, clarity, and avoiding pitfalls. Puendetura (2006) states that the already familiar drive to reach the upper levels of Bloom's taxonomy now also acts as a motivation to reach the upper levels of SAMR. Second outcome is that pairing these two outlines a clear set of steps that help guide the integration of technology in the classroom. Lastly, it prevents assuming a particular task is at a higher or lower level in either Bloom or SAMR sense than it actually is. However, Puendetura (2014) also adds that this association is not indispensable between these two categorizations.

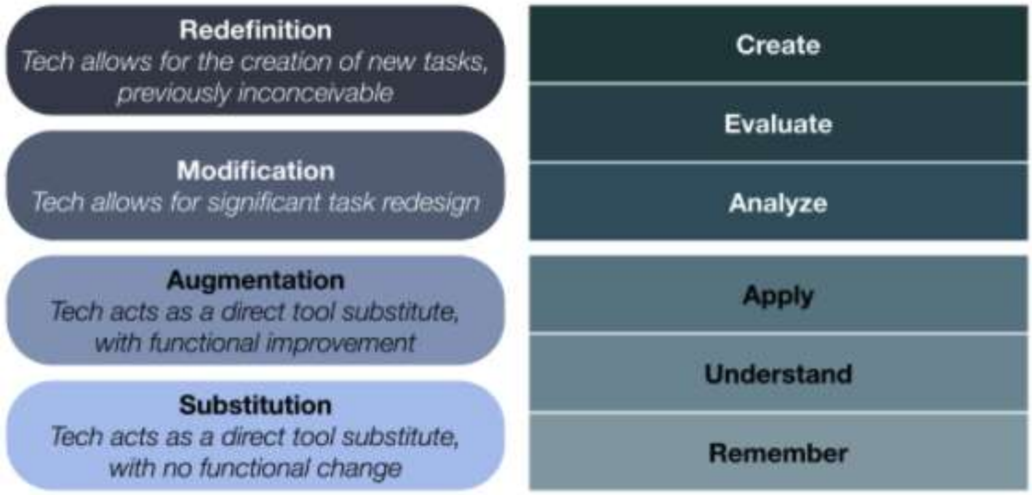


Figure 2. The SAMR Model and Bloom’s Taxonomy

Source: Puentedura (2014), *SAMR and Bloom’s taxonomy: Assembling the puzzle.* https://www.commonsense.org/education/articles/samr-and-blooms-taxonomy-assembling-the-puzzle

2.4.1. Substitution

According to Puentedura (2006), the lowest level of the SAMR model, substitution, is the integration of a digital tool with no functional change to the lesson. In other words, the digital tool used at this level is a direct substitute for non-digital learning tools or elements. According to Lobo and Jimenes (2017), the intended audience of the project applied at this step is the teacher and sometimes students This type of integration includes using digital equivalents of traditional tools such as markers and poster boards.

Recognizing, listing, describing, identifying, retrieving, naming, locating, finding are listed as the tasks which coincide with the substitution step of the SAMR model and the Remembering level of Bloom’s taxonomy, which are associated with each other (Nelson, 1999).

In various studies, different activities for this level are listed as below:

-Teachers may require students to create a PowerPoint presentation instead of a poster (Savignano, 2017).

-In-class worksheet practice or pop quiz that used to be dictated and handwritten is now done using a word processor (Lobo & Jimenes, 2017).

2.4.2. Augmentation

The second level of the SAMR model (Puntedura, 2006), augmentation, continues to replace traditional tools with digital ones. However, at this level, the digital tool offers some functional options. That is, the non-digital lesson is enhanced by a slight amount of technology (Lobo & Jimenes, 2017). The researchers state that the audience remains as the teacher or the whole class as it is in the substitution step. The fundamental difference of the augmentation step from the substitution step of technology integration is added functionality to teaching (Lobo & Jimenes, 2017).

Interpreting, summarizing, inferring, paraphrasing, classifying, comparing, explaining, annotating, categorizing are the tasks that correspond to the Augmentation step. These tasks are also correlated with the Understanding level of Bloom's revised taxonomy (Nelson, 1999).

Some examples of tasks implemented at this level taken from several studies are listed as follows;

-Students working on a group project could add an interview to their presentation by using digital tools. The use of mobile technology to conduct an interview provides added functionality (Savignano, 2017).

-Students do an online practice provided through Google Forms or a website. Previously, the teacher was supposed to hand out paper worksheets, which students had to complete by hand and return to get feedback or a grade. With the implementation of digital tools, the students can get immediate feedback from the website (Lobo & Jimenes, 2017).

-Using "comments" or "track-change" commands of a word processor document allows teachers or students to utilize more functions of a digital tool (Lobo & Jimenes, 2017).

2.4.3. Modification

The third level of the SAMR model, modification, enables technology integration to become transformative by requiring a redesign of the lesson around the digital tool (Puentedura, 2006). That is, digital components imply the integration of digital tools, hence task or learning is redesigned significantly (Lobo & Jimenes, 2017). The teacher remains as the intended audience, but students can collaborate on digital platforms and share the products that they create on that platform. At this level students are provided with learning opportunities out of the physical classroom.

The modification level is considered to be based on the evaluating and analyzing levels of Bloom's taxonomy. Therefore, the tasks, which technology allows for significant task redesign, are checking, hypothesizing, critiquing, experimenting, judging, testing, directing, monitoring (blog/vlog), commenting, reviewing, posting, moderating, collaborating, networking. These tasks are also considered as the Evaluation level of Bloom's revised taxonomy. For the Analyzing level, the modification type of tasks can be listed as comparing, organizing, deconstructing, attributing, outlining, finding, structuring, integrating, mashing, linking, tagging, validating.

Some examples of the tasks implemented at this step taken from several studies are listed as follows:

-Students are required to read an online article on a forum like Edmodo, then respond to the article and discuss it with classmates on an online forum (Savignano, 2017). Forum activities correspond to the modification level as they propose the redesign of a task using technology. This kind of activity coincides with three cognitive levels according to the revised version of Bloom's taxonomy: applying, analyzing, and evaluating. It corresponds with applying level because the students are applying the knowledge that they acquired in the class to be able to do the activity, with the analyzing level because they need to analyze a given structure in the text. Lastly, the evaluation level takes place through the feedback provided by their classmates who are to evaluate and build on their classmates' analysis.

-Students can practice their speaking skills and record themselves through audio or video to upload for the teacher and classmates (Lobo & Jimenes, 2017).

2.4.4. Redefinition

At the final level of the SAMR model, redefinition, teaching with technology cannot be replaced by traditional means (Puentedura, 2006). At this level, technology enables the creation of tasks, projects, or learning activities that could be impossible to create without it. It requires utilization of several tools. More collaboration among the students is enforced. Another characteristic of this level is that the products can be shared publicly, so the audience is not only the teacher and the classmates but also the whole world (Lobo & Jimenes, 2017).

Certain tasks are corresponding with the redefinition level such as designing, constructing, planning, producing, inventing, devising, making, programming, filming, animating, blogging, video blogging, mixing, remixing, wiki-ing, publishing, videocasting, podcasting, directing/producing. While doing these tasks, technology allows for the creation of new tasks which was previously inconceivable. These tasks coincide with Creating level in Bloom’s revised taxonomy (Nelson, 1999). The tasks accounted for in Evaluating and Analyzing levels of Bloom’s taxonomy are also recognized as redefinition tasks in the SAMR model.

Some examples of tasks implemented at this level taken from several studies are listed as:

-Students explore a historical site using Google Street View and discuss it on social media (Savignano, 2017).

-Students can create a video based on their research on a specific topic. They can edit it, prepare a script for it. Later, they can upload it on YouTube to get feedback from their peers, teachers, and possibly from the whole world (Lobo & Jimenes, 2017).

2.5. Attitudes Towards Use of Technology in Education

There has been a considerable amount of effort presented so as to effectively harmonize technology with education. With regard to this issue, attitudes have been considered as a useful indicator of the bias towards implementing technology into instruction because as Autio et al. (2011) proposed use of technology in education is mostly affected and guided by human emotions, motivation, values, and personal qualities. Therefore, the use of technology in education is dependent on the attitudes of learners towards technology. Besides, foreign language learning and teaching is one of the educational areas in which fierce debates towards the use of technology can be seen because teaching and learning a foreign language via technology is gaining more and more importance (Raman & Yamat, 2014). Furthermore, the increasing significance of technology in every aspect of life, as well as language learning and teaching, has encouraged researchers to consider whether and to what extent such educational technology can be used and benefited from (Isman, 2012). The research on the issue of the use of technology shows that attitude towards technology is one of the important factors that has an influence on the topic (Myers & Halpin, 2002).

According to Gardner's (1985, p.91-93) definition of attitude, it is "an evaluative reaction to some referent of an object, inferred on the basis of the individual's beliefs or opinions about the referent". Nolen-Hoeksema et al. (2009) stated that individuals often express their attitudes in opinion phrases such as 'I love grapefruit'. Although attitudes express feelings, they are mostly linked to cognitions, that is, to beliefs about the attitude objects. In the example of 'I love grapefruit', one can utter this sentence depending on the knowledge that 'grapefruit contains vitamin C'. Therefore, attitudes include cognitive, affective, and behavioral components (Nolen-Hoeksama et al., 2009, p.662). In short, making the connection between the integration of technology into language learning and teaching process and affective elements leads educators to the meaningful use of technology. Therefore, the notion of attitude should be carefully comprehended as it is one of the affective elements that shapes education and design of the lesson.

2.6. Acceptance of Mobile Learning Technologies

Technologies such as smartphones, tablets, and servers have increasing importance in daily life. There is no doubt that they also have a crucial role in education through the applications available for learners. Hu and McGrath (2011) claimed that the way we learn has changed and therefore the way we teach should be revised to adapt to these changes. According to Harris (2001), mobile learning intersects e-learning and mobile computing in order to provide learning experiences without the limitation of time and space. Keegan (2005) defines mobile learning as the learning experience that can be accomplished by means of devices that are small enough to fit into pockets and carry around so as to eliminate the hindrance of time and space. The concept of portability is the key term of mobile learning. The main feature of mobile learning is that time and place restriction is eliminated by using mobile technologies. As a result, mobile learning provides teachers with a more flexible way of teaching language (Sung, Chang & Yang, 2015). In the consideration of mobile learning, these tools can be best described as the mobile devices that help students make their individual learning easier (Özer & Kılıç, 2018). There are various factors that highlight the necessity of using mobile learning tools in foreign language teaching. Cangil (1999) listed the reasons to use mobile learning tools in foreign language classes as:

1. Almost every young student is familiar with technology and accustomed to using computers and technological devices.

2. Visual effects, graphics, and sounds, that is the use of multimedia, used in technology can make the lessons attractive for more students.

3. Using technology is beneficial, especially differentiating the learning experience for different learning styles. Teachers can train their students in the direction of multiple intelligence theories.

4. Students become more practical, and the context becomes more meaningful for the students when mobile learning devices are facilitated.

5. One of the enhancements that technology provides for language education is the ability to communicate with people from other countries by using the internet.

6. Through the use of technology and mobile learning devices students have a chance to participate in worldwide activities such as interpersonal change, problem-solving, and information gathering.

7. Language skills such as hearing-understanding and reading-writing can be improved by using computer software and mobile applications.

8. Students using mobile learning tools and computer-aided learning materials continue to study longer and learn faster.

Similarly, advantages of mobile learning technologies in teaching are listed by Lopez et al. (2009) as;

1. Easy access: Up-to-date information, accessible anytime, anywhere.

2. Self-study options: Flexibility allows learners to work at their own pace whenever and wherever they are.

3. Evaluation and Feedback: Mobile learning tools make it possible to measure what the learner learned during the learning process.

4. Access to various online materials: Authentic materials are available both for students and teachers.

While the advantages of mobile learning and mobile learning tools are numerous, there are also several disadvantages listed by Yousuf (2007) as follows:

1. During mobile learning, personal communication and immediate teacher feedback are limited, which is preferred by some students.

2. For helping to manage the lessons pre-course orientation is needed, and this requirement is problematic.

3. Need for teacher support during the lessons is another problematic area of mobile learning.

Technology acceptance has become a field of research in both technology systems and business since the 1970s (Legris et al., 2003). It was only during the

2000s that in the field of education research on technology acceptance became a concern and gained importance (Teo, 2014). Acceptance of mobile learning tools is as important as using mobile learning tools during language lessons effectively. Therefore, the researchers in the field have developed various scales to measure the acceptance of mobile learning tools.

2.7. Digital Literacy

In recent years, it has become an undeniable fact that digital literacy is one of the most basic requirements for individuals to be successful in living, learning, and working in a world that is becoming more and more digitalized every other passing day. It is necessary to have digital literacy skills so as to actively participate in the modern world in the professional and private areas of life. Individuals who are able to benefit from the growing power and functionality of digital technology are needed by society (Yuan et al., 2019). In the 21st century, people live in a media-driven environment. This environment includes access to a broad amount of information, rapid technological changes, and the ability to collaborate and make individual contributions.

It is necessary to define literacy so that it would be possible to draw a clear frame for digital literacy. Literacy is described as the multiplicity of knowledge, attitudes, and skills (Dore et al., 2015). The term "digital" is added to indicate information and media technology featured in many social and cultural aspects of life (Dore et al., 2015). Digital literacy is defined as the ability to use information and communication technologies in teaching and learning to reach, produce, and share information. As it is a fluid and evolving notion, many definitions have been generated since 1997. Gilster (1997) coined the term digital literacy. The term is defined as the "ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (Gilster, 1997, p.1). This definition does not only focus on simply having technical skills but also reflective competence. Ferrari (2012) stated that, "Being digitally literate implies the ability to understand media (as most medium are digitalized), to search and think critically about retrievable information (with the widespread use of the internet), and be able to communicate with others through a variety of digital tools and applications" (p.16).

Murray (2018) states that digital literacy infers to reading and writing skills without paper, pencils, books, or lectures. According to Lynch (2017) digital literacy is the ability to find, create, evaluate, utilize, share, and create information found online. In addition, Heitin (2016) asserts that digital literacy requires both cognitive and technological skills to find, evaluate, create and communicate information on various digital platforms through writing and other forms of communication. Similarly, Dore et al (2015) inserted that digital literacy incorporates "basic functional digital skills" to use digital services and applications, this skill enables users to benefit from digital technology in a meaningful way. If a user accomplishes using technology in a beneficial and meaningful way, it is called "generic digital skills". Generic digital skills require a user to go beyond merely using technology and incorporate "critical information literacy" to consume information critically. According to Yuan et al (2019), the current understanding of digital literacies encompasses features of different types of literacies such as ICT literacy, information literacy, media literacy, and visual literacy.

In education, digital media is used for activities such as exploring, connecting and learning. Developing digital literacies can be defined as including flexibility, adaptation, and managing social relationships in a world that requires innovative, original, and self-directed problem-solving. Therefore, it has become a vital issue in the area of education in the 2000s. In order to become progressive educators, there is a need to change the pedagogy to fit the demands of this fast-paced world. Thinking, learning and finding out things are more crucial than passively learning a body of knowledge. In today's society, the ability to navigate in the digital world and the way of using the information discovered is more countable than purely knowing anything (Tapscott, 2008). Belshaw (2011) listed eight elements of digital literacies, which are gathered from various definitions of digital literacy. These eight elements define digital literacy as it should be cultural, cognitive, constructive, communicative, confident, creative, critical, civic.

It is also emphasized that students need to become conscious of how to learn, they need to be creative, open to experiments, be able to communicate, disseminate, take responsibility, work together, exchange and respectfully discuss opinions (Nelson, 1999). Many students are familiar with a variety of digital technology such as tablets, smartphones, and computers. A lot of students know how to use websites, share images, and search information through search engines. However, digital literacy goes beyond these basic technology skills. According to Lynch (2017), one of the most important components of digital literacy is evaluating the information after finding it. The students should as well know how to analyze and synthesize knowledge after accessing it. Therefore, it is vital for teachers to enhance students' digital literacy in the classroom. Rosen and Nelson (2008) identify a generation of learners well-versed in using collaborative technologies to participate in the World Wide Web as creators rather than consumers. These students are attracted to group activities because they seek interaction within vibrant online communities of productive individuals. Thus, educators should be attuned to some implications specific to this generation.

In the area of English language learning and teaching, the term digital literacy is gaining importance as well. The fundamental characteristics of digital literacies such as being critical, multimodal and participatory provide an authentic learning environment for English language learners. It also enables these learners to be active participants, reinforces autonomy and ownership of learning. In addition, learning goes beyond the classroom and students can develop their language skills outside of the classroom. As a result, it can be said that the integration of digital literacy into English teaching pedagogies can change the power dynamics of a traditional English classroom. It provides equity in terms of accessing materials and authentic materials. In addition, when the literature is reviewed, technology-enhanced language acquisition through digital literacy software makes learning easier, more fun, and as a result, students are more likely to be motivated intrinsically.

There is some parallelism between the SAMR model and the integration of digital literacy into the classroom. Upon considering the suggestions made by Mantiri (2019) on the activities to promote higher order thinking skills and meaning construction in a digital literacy environment, it can be easily understood that each level of the SAMR model should be taken into consideration while including digital literacy in classrooms. Using interactive whiteboard while designing lessons, engaging information exchange with students from other countries, making use of storytelling applications to allow students to create and publish stories, setting up a blog, or online platform that would enable students to interact with each other, encouraging them to interact with each other on these online platforms, engaging students in discussions about thinking critically about the medium and the message are some of the aforementioned suggestions. According to the SAMR model, integration of interactive whiteboard corresponds with Substitution and Augmentation levels, as it substitutes traditional whiteboard and it also includes some tools to make changes while delivering the lesson, the others coincide with transformation phase of the SAMR model, which are Modification and Redefinition levels. These levels both support peer exchange and interaction, and particularly Redefinition level encourages critical thinking for a wider audience.

To sum up, technology has been affecting every aspect of our daily lives including the area of education. All the developments in technology have also had an effect on English language classes. However, the teachers need to make sure that the effects of technology in language classes enhance the learning process. It is definitely not recommended to use technology just for the sake of using technology. Therefore, it is suggested to make use of some technology integration frameworks that have already been developed. While integrating technology into class, SAMR Model offers a framework to evaluate the activities and tools to be used. While making use of the SAMR model for technology integration, it is important to evaluate the digital literacy level of the students. Students are surrounded by technology in this era. However, using technology in the lessons for educational purposes can make a difference in their digital literacy levels. The attitudes towards the use of technology and acceptance of mobile learning tools are other two constructs to be evaluated while implementing any kind of technology in the class.

CHAPTER 3

METHODOLOGY

3.1. Research Design

In this study, mixed-methods research was conducted consisting of both quantitative and qualitative research methods. In quantitative research, researchers work with huge amounts of statistical data based on which they can draw generalizations and conclusions (Rubin & Babbie, 2008). The data is gathered in order to be transformed into numbers so that it may be used as statistics. According to quantitative researchers, facts and feelings can be separated. On the other hand, qualitative researchers are more concerned with taking the perspective of the participants into consideration while analyzing the situations (Fraenkel et al., 2012). Thus, quantitative research aids the researcher to have an insight into individuals' behavior, opinions, or motivations, and how individuals see the world around them. Creswell (1999) also stated that qualitative research has its merits in providing an in-depth analysis of the situation. It helps discover new ideas and gain new insights into a complex phenomenon (Croker, 2009).

The third methodological movement, mixed methods research, is defined by Creswell (2014) as "an approach to an inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs that may involve philosophical assumptions and theoretical frameworks" (p.15). Mixed method research consists of both using quantitative and qualitative methods in one study. Fraenkel et al. (2012) claim that the main aim of using both methods is to provide a more complete understanding of research problems compared to the use of merely one approach alone. Mixed-method research provides a deeper understanding by enabling a comparison of the relationship between variables. Similarly, Johnson & Onwuegbuzie (2004) state that taking a mixed-methods approach to a study is considered valuable because it might lead to a comprehensive evaluation and a more complete account of the data collected during the pre-test and post-test process. The use of mixed methods approach also aims to ensure triangulation and complementarity. Bryman (2006) declares that triangulation is the act of combining quantitative and qualitative research results in order to obtain mutual confirmation of the findings while complementarity refers to the argument for bringing together quantitative and qualitative research to provide a complete account of what is being studied by looking at different aspects of the topic.

3.2. The Participants

In this study, participants are selected through the convenience sampling method due to the CoViD-19 pandemic that started during the data collection period of the study. According to Dörnyei (2007), convenience sampling is selecting samples who are members of the target population that meet certain criteria such as accessibility, geographical location, availability, or the willingness to participate. Creswell (2016) also states that a researcher chooses participants who can contribute to the development of the theory. In addition, an essential part of achieving this aim is to select and study a homogeneous sample of individuals. According to Dörnyei (2007) members of the target population in convenience sampling are homogeneous, which consolidate the study.

The participants of this study were students at an English preparatory school of a private university. The medium of instruction is English at the university. The students who enroll in the departments with the medium of English instruction need to be proficient in English to take departmental courses. Therefore, these students take a placement test when they enroll in the university. If they pass this test, they take the proficiency exam to get a score of a minimum of 60 to move on to their departments.

In this study 17 tertiary level students, both female and male studying at a private university English preparation school participated. All the students started studying A level (B1+ Intermediate) courses when they first joined in the research. Considering each level lasts for eight weeks, the research started in the first week of the A level course. All the participants were taught the same course materials and teaching points during the course. They were taught the same course content since the beginning of the academic year. As it was an eight-week-long study in which the same sample of individuals was surveyed at different times during the survey, there were a greater number of students who participated in the study. However, due to various personal excuses and due to the lockdown during the CoViD-19 pandemic, they opted to withdraw from the study.

The majority of the students (10 out of 17) were 19 at the time study was conducted. Five students were 20 years old, and only two students were 21 years old. Although the aim was to have a homogenous group, there were 11 male and 6 female student participants in the study. While 8 students graduated from Anatolian high school where English was taught extensively, 7 students graduated from regular high schools. There was only 1 student who graduated from technical/vocational high school where English was taught extensively.

3.3. Data Collection Instruments

To collect the quantitative data a four-part questionnaire was used. In addition, after completing each activity during the intervention period, learners were given a short survey evaluating the activity in terms of its usefulness and to state their own perceptions towards it.

The questionnaire consisted of two main parts. The first part was intended to give general information and a consent form. The second part consisted of questions regarding*, "Digital literacy scale", "Mobile learning tools acceptance scale", "Students' attitudes towards technology use in the lesson"*. Before these questions, in order to gather demographic data, students' year of birth, gender, and high school they graduated from was asked.

3.3.1. Digital Literacy Scale

To measure digital literacy levels of the students, a scale was developed by Ng (2012). Üstündağ et al. (2017) translated the scale into Turkish. One of the main aims of this study was to provide a digital literacy scale in Turkish, which is easy to implement. It was also aimed to investigate the qualifications of Turkish pre-service science teachers in terms of their digital literacy skills. This scale is also well accepted by the literature. Üstündağ et al. (2017) found that Cronbach's alpha value was 0.86 corresponding to high reliability. This is a feasible scale to measure digital literacy to some extent.

3.3.2. Mobile Learning Tools Acceptance Scale

Another scale used in this study was developed by Ozer and Kılıç (2018). Even though the name of the scale does not consist of any foreign language learning wording, this scale is mainly aimed to measure students' acceptance of mobile learning tools while learning a foreign language. In particular statements 3, 5, 9, 13, 15, 19 aim to measure the relationship between foreign language learning and mobile learning tools acceptance while the other statements focus on a more general acceptance of mobile learning tools. The Cronbach's alpha was found as 0.87 corresponding to high reliability (Ozer & Kılıç, 2018).

3.3.3. Students' Attitudes Towards Technology Use in the Lesson

Attitude is one of the most influential qualities in learning either in a positive or negative way. As a result, it was aimed to measure attitudes of the students towards technology use during classes. Attitudes towards the technology scale developed by Kenar and Balcı (2013) was used. The Cronbach's alpha value was found as 0.86 corresponding to high reliability (Balcı & Kenar, 2013).

3.3.4. Activity Evaluation Forms

Apart from the scales used for pre and post-test parts of the data collection process, an activity evaluation form was given to students after each activity. This instrument was used to investigate students' perceptions regarding each activity in the implementation and to gather their perception towards overall implementation. The evaluation forms were adapted from the study of Lobo and Jimenez (2017). The evaluation form consisted of 4 simple questions. The form investigated how the activity helped students' language skills, in what way, what are their perceptions of the particular activity and what are their overall comments on the activity. For the second question, there were 4 options each of which corresponds to one part of the SAMR model. This question was asked in order to determine if the activity could be seen at the intended level of the SAMR model by the students. The third question asked about their perceptions of the activity more specifically. The choices for this question were "appropriate" "good" "fair" "poor". The last question was asked in order to collect qualitative data, the overall comments of the students on the activity.

3.4. Data Collection

In this research, one group pre-test post-test quasi-experimental research design was implemented to evaluate participants' level of digital literacy, acceptance of mobile learning tools, attitudes towards technology. During a 6-week period of time learners were asked to complete four activities using various mobile applications and tools. Each of these activities was designed to match with each level of the SAMR model, which is Substitution, Augmentation, Modification, and Redefinition. An expert opinion was taken into consideration to ensure that each activity corresponds to the appropriate level of SAMR model. Upon completing each activity, learners were given a short survey evaluating the activity in terms of its usefulness and their own perceptions towards it. The procedure is indicated in Figure 3.

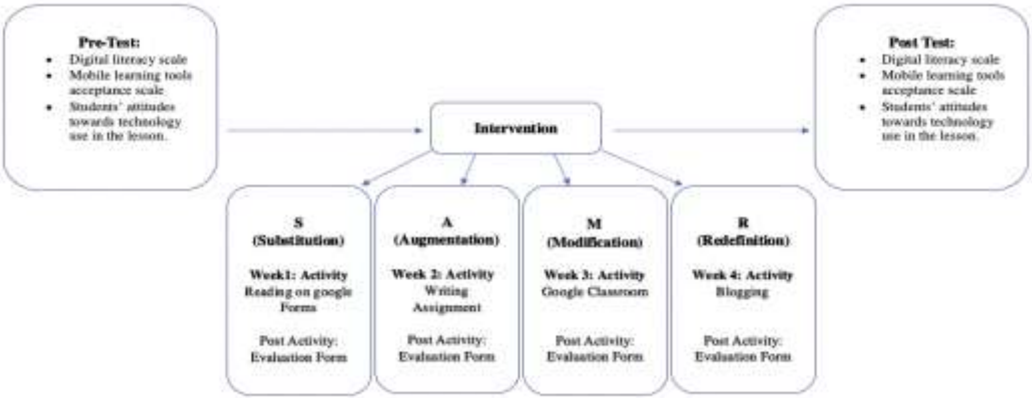


Figure 3. Design of the Study

3.4.1. Substitution Activity

When evaluating whether an activity is a part of the Substitution level, Puentedura (2015) suggested asking, "What will be gained by replacing older technology with the new technology?". According to Hilton (2016), the Substitution level is the "use of technology for a task that could be accomplished without technology" (p. 68) and it makes the use of technology insignificant. For instance, when students are presented with multiple-choice or short answer questions during a traditional quiz, they are required to use a writing tool, such as a pencil or pen. When it is digitalized, they may only need to click on the correct option by using a mouse or write an answer using a keyboard, which means using technology serves merely as a substitute for paper, pen and pencil.

Google Forms is a web-based free online software that enables creating surveys, quizzes, and questionnaires. It allows creating questions in different forms such as short-answer, multiple-choice, dropdown, etc. A reading text and post-reading questions can be presented on Google Forms. As a direct tool substitute, Google Forms quizzes can accomplish the same objective without functional changes using mobile devices with the traditional quizzes. Google Forms quizzes may include both multiple-choice and short answer questions. Instead of using a traditional pen or pencil to write answers, students use a keyboard to type their answers. Although conveying a Google Forms quiz with mobile or laptop technology differs from a traditional paper-based quiz, the outcome effectuates no functional change notwithstanding the present technology hardware. In this study, students were given a reading text and answered post-reading questions on Google Forms. This activity was regarded as a Substitution level activity because there was no functional change when technology is integrated into this reading text. The activity was chosen considering the weekly schedule of the school. The students were expected to read and answer the questions on their hard copy material packs which were prepared and provided by the material office of the school. For the purpose of this study, they did the same activity on the screen, on their mobile devices instead of paper. Therefore, the teacher changed only the medium of the activity from paper to screen. Hence, it can be said that technology acted as a tool substitute. On Google Forms students could have received synchronous feedback while answering the questions. However, for the purpose of staying at the Substitution level, the teacher opted out of this feature. Delayed feedback was given by the teacher to the whole class after the activity was completed by all the students.

The results of the activity were evaluated by two teachers separately out of 15 points. The first 4 questions were short answer comprehension questions. Each correct answer was given 2 points and grammar and spelling mistakes were disregarded. The following 3 questions were multiple-choice vocabulary questions and for each correct answer, students got 2 points. The last question asked for the explanation of a phrase from the reading text in 30-50 words. It was evaluated out of 4 points.

3.4.2. Augmentation Activity

At this level, technology acts as a direct tool substitute with functional improvement (Puendetura, 2013). One of the examples of teaching activities at the Augmentation level is that the students practice their writing using Microsoft word. However, they are expected to use tools provided by Microsoft Word such as highlighting, inserting a picture, editing the format of their writing. In this writing process, students do not only use ICT (i.e., laptop, Ms. Words) for writing, but they also use other ICT functions allowing them to learn more knowledge in the process.

For this study, students were asked to write an essay. The students were supposed to write an essay that week according to the weekly schedule. During previous lessons, students learned how to write an essay including a thesis statement, body paragraphs, introductory and conclusion paragraphs. The essays were evaluated according to a rubric out of 30. Instead of writing on a paper, participatory students were asked to write their answers on Microsoft Word or an equivalent word processor program. In addition, students were asked to use the highlighting tool of the word processor program and highlight the thesis statement, topic sentences. The aim of the activity was to raise students' awareness of the organization of the essay by using additional tools of the word processor program. In order to encourage students to utilize more tools, the teacher asked them to insert a photo related to the topic of their essay. The essays were later evaluated by two teachers separately using the same rubric.

3.4.3. Modification Activity

At the modification level, technology allows for significant task redesign (Puentedura, 2006). The amount of the target audience of the product produced by the students increases (Lobo & Jimenez, 2017). That is, the students present what they prepare with a larger number of people instead of merely sharing with the teacher. At this level students share their products with the class teacher and other students. Students comment on each other's products to provide peer feedback.

In this study, Google Classroom is used to facilitate English learning at the modification level of the SAMR model. Google Classroom is part of the Google Apps for Education suite of online productivity apps packaged for teachers and students for online learning and collaboration. The users are not required to pay any fees, so it is free to be used by anyone. On Google Classroom, a teacher creates a virtual class, and it is possible to add information about the class. Then, the teacher invites students by sending them a class code created by Google Classroom. After the students join, the teacher may send announcements or assignments to the class. Students may have a class discussion; they may make comments on their classmates' products. They can communicate with their classmates and teacher(s) whenever they need.

The importance of giving feedback to each other is that the students must believe that they write to be read, they have a real audience. The internet has played a significant role in how student writing can gain a sense of audience. It has increased the number of the audience that students may share their writing with (Dalbotten et al., 2014). Students can write and publish their work to be read to a wider range of audiences almost instantly. Using online blogs, wikis, and collaborative writing software, such as Google Docs, are all a part of this digital writing structure that students are attracted to. This brings the feeling that they have a larger amount of audience (Ito et al., 2008).

In this activity, students shared an essay with their peers on Google Classroom. Each student was required to make comments on at least three different classmates' shared works. The evaluation of this activity was done by two separate teachers. For sharing a piece of their work with their classmates on Google Classroom they got 4 points. For each feedback they provided, the students got 2 points.

3.4.4. Redefinition Activity

At this step, technology allows for the creation of new tasks, previously inconceivable (Puentedura, 2006). Integrating technology at this level requires multimedia elements included in students' work. The target audience of the student is larger; the whole world (Lobo & Jimenez, 2017). The products of the students can be shared on websites such as YouTube or blogger.

Using Blogger, a free Google-powered weblog-generating website, it is possible to create motivating and empowering learning opportunities for students

(Gerich, 2013). Instructors can create their blogs such as a blog that builds a classroom community-learning setting. This enables them to extend classroom lessons to online practice. In addition, instructors can encourage students to the blog-creating process, leading them to write their blogs.

For this activity, the teacher created a blog page for the classroom and shared the log-in information with the class. Students were grouped into three or four. They chose a topic as a group. Among the topics chosen were *social media addiction*, *obesity*, *cyberbullying*, *alcoholism, and being a professional e-sport player*. They were asked to create a blog post on blogger. The blog post had to contain some photos related to the topic, a 2-minute video explaining one side of their topics such as the effects, reasons, or advantages of the topic and a 200-word text explaining the other side of their topic such as the causes, results or disadvantages of the same topic. The students practiced their writing and speaking skills. Their videos and texts were evaluated by two separate teachers.

3.5. Data Analysis

A repeated measure of ANOVA was run to analyze pre- and post-test of digital literacy, mobile learning acceptance, and attitude towards technology. Students' perceptions and achievement scores regarding each of four activities were also analyzed with repeated measures ANOVA, and the outcomes of each of four activities were included into the analysis. In repeated measures ANOVA, the same measure was collected at two or more occasions from the participants; moreover, it analyzed the difference between these occasions (Field, 2017).

The overall written comments of the students regarding each activity were coded. Coding is the process of creating categories and assigning them to selected data (Dey, 1993). The categories emerged from the data. The main purpose of creating categories was to identify a pattern in the comments of various students regarding the particular activity. In general, the adjectives are highlighted, as well as alternative tools mentioned by the students to see if their perception was neutral, positive or negative.

CHAPTER 4

RESULTS

Difference between Pre-test and Post-test of Digital Literacy Scores of the Students

The descriptive information of pre- and post-test of digital literacy scores are illustrated in Table 1.

Table 1.
The Descriptive Information of Pre- and Post-Test of Digital Literacy Scores

Digital Literacy	*M*	*SD*
Pre-test	22.00	5.10
Post-test	17.94	5.93
Note. N = 17		

There was a decrease from pre-test to post test scores of digital literacies. The difference was found significant, $F\ (1, 16) = 15.508$, $p = .000$, partial $\eta^2 = .492$ indicating that 49.2% of variance explained. At the beginning of the course, students believed that they had higher digital literacy; however, after the course, they stated that their digital literacy level was lower. Since students engaged with the productive side of technology, they became more aware of the productivity side of it. They are very competent users of social media and smartphones; however, these skills were not enough to use for productivity purposes. Figure 4 also presents a summary of the means of digital literacy level scores of the students before and after the implementation.

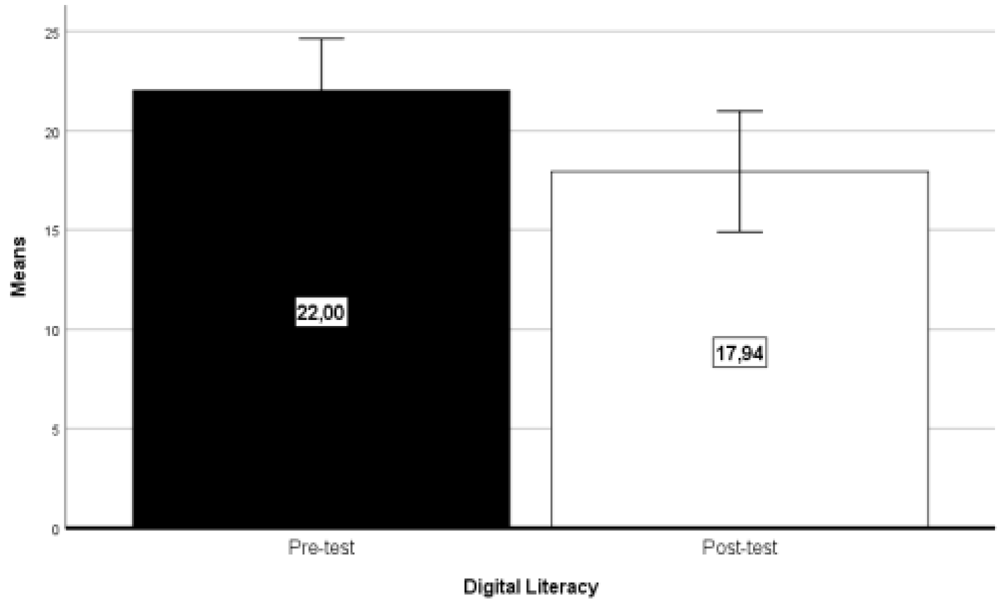


Figure 4. Summary of the Means of Digital Literacy Levels

Difference between Pre-test and Post-test of Mobile Learning Acceptance Scores of the Students

The descriptive information of pre- and post-test of mobile learning acceptance scores are illustrated in Table 2.

Table 2.
The Descriptive Information of Pre- and Post-Test Mobile Learning Acceptance Scores

Mobile Learning Acceptance	*Mean*	*SD*
Pre-test	62.18	8.07
Post-test	65.94	16.41
Note. N = 17		

There was an increase from pre-test to post test scores of mobile learning acceptance. The difference was not found significant, $F (1, 16) = 1.362$, $p = .260$. At the beginning of the course, students' mobile learning acceptance was lower, and at the end of the course, it was increased.

Difference between Pre-test and Post-test of Attitude Towards Technology scores of the Students

The descriptive information of pre- and post-test of attitude towards technology scores are illustrated in Table 3.

Table 3.
The Descriptive Information of Pre- and Post-Test of Attitude Towards

Attitude Towards Technology	*M*	*SD*
Pre-test	41.76	4.024
Post-test	40.06	7.822
Note. N = 17		

There was a decrease from pre-test to post test scores of attitudes towards technology. The difference was not found significant, $F(1, 16) = .705$, $p = .414$. At the beginning of the course, students' attitude towards technology was higher, and at the end of the course, it decreased.

***Difference* between Activities in terms of Students' Perceptions Related to Activities Helping to Understand and Use English**

The descriptive information of students' perceptions helping to understand and use English in each activity is illustrated in Table 4.

Table 4.
The descriptive information of students' perceptions helping to understand and use English in each activity

Activity	*M*	*SD*
Substitution	2.18	.951
Augmentation	2.12	1.111
Modification	1.53	.514
Redefinition	1.29	.470
Note. N = 17		

The difference between activities in terms of students' perceptions related to activities helping to understand and use English were significantly different, $F(3, 48) = 4.762$, $p = .006$. Students' perception was going positive at the last activity; there was an increasing trend. Figure 5 also summarizes the mean perception scores. The order of the scale was "1- Very much 2-More or less 3-Not so much and 4-Not at all". Therefore, the higher the score is, the more negative the students' perceptions towards the activity.

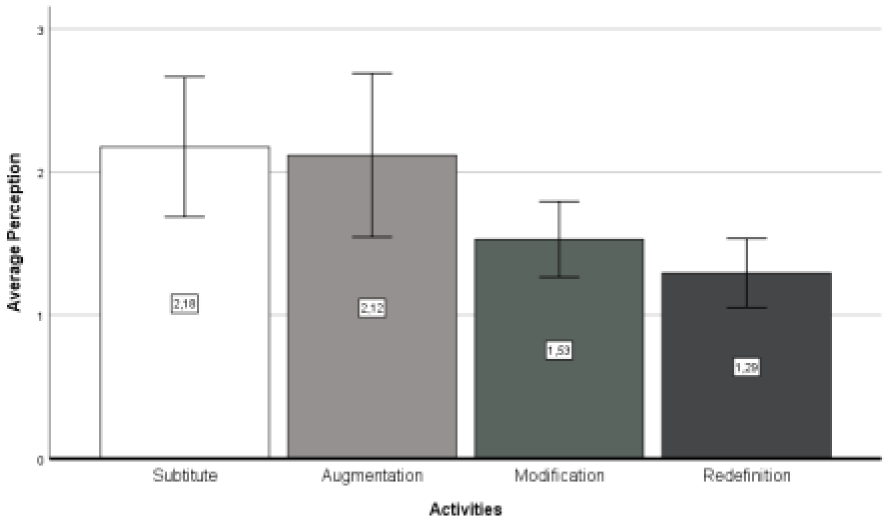


Figure 5. Summary of the mean perception scores

Difference between Activities in terms of Students' Overall Evaluation Related to Activities

The descriptive information of students' students' overall evaluation related to activities in each activity is illustrated in the following table (Table 5). The perception scale was 1 – Appropriate, 2 – Good, 3 – Fair, and 4 – Poor. The lower scores there are, the more positive evaluations students made related to the corresponding activity.

Table 5.
The descriptive information of students' students' overall evaluation related to activities in each level

Activity	*M*	*SD*
Substitution	2.41	.870
Augmentation	2.06	.899
Modification	1.82	.393
Redefinition	1.65	.493
Note. N = 17		

The difference between activities in terms of students' overall evaluation related to activities were significantly different, F (3, 48) = 3.222, p= .031. Students' overall evaluation was going positive towards the last activity; there was an increasing trend. The following graph (Figure 6) also summarizes the mean overall evaluation scores.

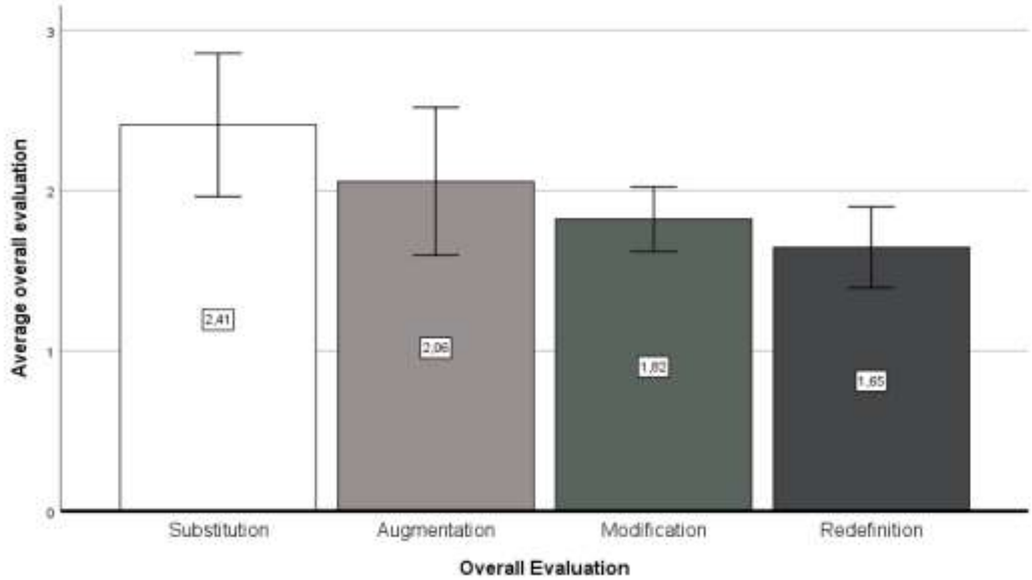


Figure 6. Summary of the mean overall evaluation scores

Difference between Activities in terms of Students' Achievement Scores

The descriptive information of students' achievement scores for each activity is illustrated in the following table (Table 6). The scores were calculated as percentages since for each achievement test, the maximum scores were not the same.

Table 6.
The descriptive information of students’ achievement scores in each

Activity	*M*	*SD*
Substitution	68.63	.23
Augmentation	58.19	.35
Modification	58.82	.36
Redefinition	87.21	.10
Note. N = 17		

The difference between activities in term of achievement scores of students were significantly different, $F(3, 48) = 4.063$, $p = .021$. In Redefinition, students obtained the highest score. In Augmentation and Modification, the scores were the lowest. It can be stated that students’ achievement at Redefinition was the reason for the significant difference. Figure 7 also summarizes the mean achievement scores.

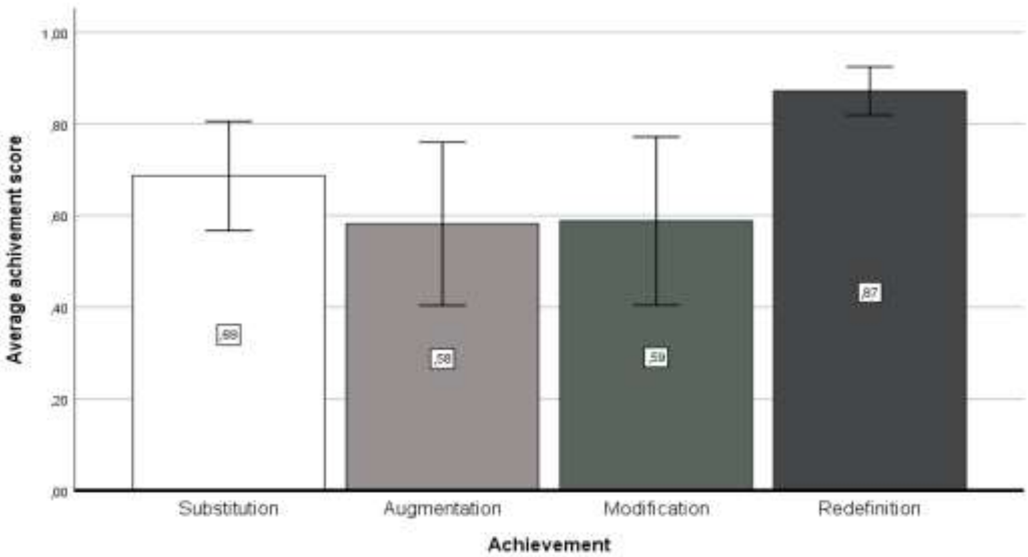


Figure 7. Summary of the mean achievement scores

Perceptions of students related to each activity

Substitution: Students highlighted five points related to this activity: 1) Preference to traditional, 2) difficulty, 3) enjoyment 4) negative effects of technology. Seven students (41.18%) stated that books, pen, and paper would be better than using technology. They also stated that they could focus better with traditional tools. Four students (23.53%) mentioned the difficulty of the activity. Two of them said the activity was not difficult while one said it was difficult at the beginning of the activity; however, with progress, it became easier. The rest of the four students emphasized they had a hard time during the activity. Seven students express their enjoyment or disliking related to the activity. Five of those six stated that they really liked the activity, and they said technology was the main reason. One of those six said (s)he did not like the activity.

Augmentation: Similar comments generated in Substitution emerged under this activity. However, their distribution was different. For instance, only one student (5.89%) stated that the activity was difficult. (S)he expressed her/his writing and related efforts that *"Writing on computer was difficult for me as I don't like writing at all. It was difficult to use capital case - lower case letters. It would be awesome for the ones who like it."*

In contrast, seven students (41.17%) indicated that they liked the activity. Four of those seven students expressed the underlying reason for liking the activity, which was some features of technology they had used. Some of the comments made were: *"I am used to using a keyboard, so it was more practical and easier. I had a chance to do research as well. I liked it.", "It was much better to do writing exercises on the computer. It was easier to see and correct my mistakes.", "It was useful. highlighting some parts help me follow the organization of the essay. Inserting pictures makes it more colorful.", "We should write using applications that show us our mistakes."*

Students indicated the practical side of using keyboard, online searching, correcting misspelling, and typos, inserting pictures, and highlighting. Finally, five students (29.41%) stated that they preferred to use traditional tools such as pen and paper for writing activities. In common, they said using a computer or phone keyboard was not as efficient as pen and paper. They made many spelling errors and had a hard time using punctuations and capital letters. One of five students said that writing with the support of technology did not improve her/his writing skills as well.

Modification: In this activity, all the students expressed their satisfaction at a high-level. Ten students (58.82%) indicated that the collaborative nature of the activity, an opportunity of seeing other peers' work and giving feedback to their products made them think the activity was a good one. The rest of the students stated that the activity worked effectively with technology.

Redefinition: The students' comments related to this activity were very similar to the modification activity. They majority liked the collaborative nature and working as a team. Moreover, they had a feeling that technology really helped them to complete their homework and improve their language skills.

In overall evaluation of students' comments, students thought that modification and redefinition activities were more suitable for technology use; however, for substitution and augmentation, they did not completely share the same feelings. According to them, the more complex an activity, the more they had advantages.

CHAPTER 5

DISCUSSION

This study is aimed to explore the SAMR model of technology integration into English language education in terms of its effect on digital literacy, mobile learning acceptance, and attitudes towards technology.

The first research question of the current study aimed to reveal if integrating the SAMR model into the English learning process influences the students' digital literacy levels. The results of the analysis revealed that prior to the implementation of the SAMR model, in the pre-test, students scored higher than post-test. In other words, upon applying the SAMR model to their English learning process, students thought their digital literacy levels were not as high as they thought at the beginning of the study. The main reason for this result could be that the implementation raised the students' awareness regarding what digital literacy actually is. Taking their age into consideration, these students are called digital natives. According to Prensky (2001), digital natives have a culture of connectivity and online creating and sharing. They have e-lives that revolve around the Internet, they are born into a world full of technology. They all use mobile technologies such as laptops, mobile phones, tablets in their daily lives. They are equipped with digital skills; they know how to use these technologies. However, there is a difference between being digital native and digital literate in terms of utilizing digital tools. While digital skills focus on how and what, digital literacy's focus is on why, when, who, and for whom. For instance, digital literate students are supposed to know how to choose appropriate images instead of solely searching for images (Bali, 2016). "Through the instruction of these digital literacies, we have an opportunity to not just understand but also to reframe what counts as literacy. There is a need to work with students to examine and redefine what is meant by reading, writing, and text" (O'Bryne, 2016, p. 5). SAMR model integration helped students with redefining their digital literacy levels. In addition, some researchers argued that the use of technology by young people is different in education in that most lack the skills and strategies to use them for learning (Kennedy et al., 2008). Many digital natives do not know how to use technology for educational purposes. However, it does not mean that they are disqualified from being called digital natives. According to Ng (2012) it can be inferred that young people do not necessarily think or know about educational technologies unless they are exposed to them.

The results for the second research question of the study demonstrated that applying the SAMR model to English lessons does not have a significant effect on the acceptance of mobile learning. Although their mobile learning acceptance scores were slightly higher in the post-test this was not significant statistically. Prensky (2001) stated they are digital natives surrounded by wireless technology, they have e-lives that revolve around the internet where they interact with others, playing online games, socializing via social media networks, blogging, etc. That is, students might not have difficulty during the implementation, and this did not make any effect on their acceptance levels of the mobile technology. Therefore, as they have already accepted mobile learning, integration of the SAMR model did not have a significant effect. Another reason could have been partly caused by the ubiquity feature of mobile learning, that is, mobile learning enables access to information simply and fluidly in any situation and makes the learning process more student-centered. During the study, although all students had tablets delivered by their school, some students might have not used them. Al-masri and Mahmoud (2012) stated that mobile devices have become one of the most powerful technologies available to the individual for ubiquitously acquiring knowledge. Considering the ubiquity feature of mobile learning, students had access to the information and were able to complete the assignments for this study regardless of tool, place and time. This situation poses a challenge for the study as it is difficult to have control over the devices they use. In addition, the activities might not have completely encouraged them to utilize mobile learning tools. As a result, their acceptance level might have not been affected by the integration of the SAMR model because of the ubiquity of mobile devices.

The results of the study also indicated that there is no change in the students' attitudes towards technology before and after applying the SAMR model. According to Tapscott (2008), 'Net Generation' relies on many sorts of technologies from computer or cell phone-based instant messaging to Google and Wikipedia. Therefore, they expect and even demand innovation in each area of their life and including education. Although one of the main purposes of this study was to determine if the SAMR model of integration influences the students' attitude towards technology, it is possible to say that the participant students' attitudes towards the use of technology could be already formed, and as a result, no significant result was demonstrated in the analysis.

The analysis of the study showed that the Substitution and Augmentation levels of the SAMR model helped the students less than the Modification and Redefinition levels with their understanding and using English. At the last two levels of the SAMR Model, effort, engagement and audience are increased. At the Modification level, students were expected to interact with each other, and they commented on each other's posts on Google Classroom. Probably, they might have tried to be seen as appropriate by their peers. For the Redefinition level, the students prepared a blog and they created videos and wrote essays on the blog. In this activity, the audience was the real world, that is they shared their products in public domains where all the internet users could access and the students made great efforts to use multimedia. Previous studies revealed many benefits of blogging as an instructional practice. For instance, Armstrong and Retterer (2008), Bloch and Crosby (2008), Noytim (2010), and Sun (2010) stated that using blogs in language instruction can help language learners develop English writing skills. Blogging enables students to communicate with an authentic audience while they are engaging in, using and understanding the English language. According to Grami (2012), Mynard (2007), and Noytim (2010) blogs can enhance students' higher-order thinking skills because blogs help students to explore new ideas, create links between the familiar and unfamiliar notions, think about various possibilities, and explain things to themselves before explaining them to others. In addition, Lohnes (2006) described blogging as a dynamic interaction that supports interaction in a learning environment. When blogs are used by students and teachers in order to facilitate thought-provoking discussion, application of and connection between concepts, students personalize the learning experience more. Bakar et al., (2010) sought to examine the effectiveness of using blogs in ESL instruction. According to their study, participants indicated a positive attitude toward using blogging in instruction because over ninety percent of the students pointed out that blogging is a useful learning tool. Smith (2009) reported that students' receiving, processing, and constructing English skills improved after they engaged in blogging activities while learning the language. Peer feedback is another important factor that encourages students' participation in online discussions. In interviews that followed the blogging project, students expressed positive attitudes toward blogging activities and receiving comments and feedback on their entries (Gramni, 2012). Ertmer et al. (2007) stated that in a dynamic social environment, peer feedback has a significant influence on students' engagement in online discussions. Many previous studies demonstrated positive correlations between peer feedback and student learning (McLeod,2001). Reuse-Durham (2005) found that peer feedback is considered helpful, constructive, and understandable by the students. Van den Boom et al. (2007) confirmed that students receiving peer feedback give more importance to learning tasks while those without peer feedback give less importance.

The analysis of the achievement scores of the students for each activity showed that the students' scores did not increase or decrease regularly. At the substitution level, students were supposed to do a reading activity on google forms and answer the questions related to the reading text. The activity was supposed to be completed on paper by the students according to the weekly schedule of the school. The teacher changed just the medium of the activity from paper to screen in order to make it a suitable substitution activity. The overall success of the students was 68 out of 100 points. Compared to the augmentation and modification levels, this score is higher. Underlying reason for this could be that nowadays an increasing amount of time is spent reading electronic documents. Hence, a screen-based reading behavior is emerging among people, and students can adapt from paper to screens easily (Liu, 2005). Their overall success does not get affected negatively in this level because there is no functional change in the activity. At augmentation and modification levels students scored less than the substitution level. At the augmentation level, students were expected to write an essay using the highlighting tool of the word processor and add a topic-relevant picture to their writing task. Technology is used with functional improvement at this level. The reason for students' comparatively lower scores in this level could be that students find navigation and annotation functions of electronic documents inferior to paper (Stoop et al., 2013). At the modification level, students were expected to share a writing task on Google Classroom and provide feedback for at least three classmates. They might have found the activity a bit confusing. Some of them used Google Classroom for the first time. The students generally lack feedback-giving skills. When the results are considered, it can be also concluded that the activities including only writing assignment, writing an essay at the augmentation level and sharing an essay at the modification level, might be the reason for the low achievement scores as Negari (2011) puts forward that writing skill while practicing a second or foreign language is the most difficult language skill for language learners to practice. Apart from the tools they used, the skill itself could have affected the achievement scores of the learners at these levels.

At the redefinition level, students were supposed to prepare a blog entry that includes a short video and an essay on the topic given to them by the teacher. They got the highest score from this activity in all the levels of the SAMR Model. The students were highly motivated when they heard they were going to prepare a blog. In a previous study, it is stated that printed text is a solitary experience, while a web text, by way of tools such as the blog, allows a person to open a dialogue with the writer and other readers by leaving comments (Gilbert et al., 2016). As Lohnes (2006) stated blogging supports communication in a learning community. The students might feel less anxious as they expressed their ideas more freely both written and spoken way probably because of the authenticity of interaction that was provided by the blogging activity. This could be one of the underlying reasons for their high scores at the last step of the SAMR Model. Another reason could be that they got familiar with the SAMR Model of technology integration step by step. At the final level, they had self-confidence in sharing and giving feedback to each other using technology.

For the purposes of the study, after each activity of the SAMR model integration, students were asked to write their opinions of the activity. In general students' comments on activities were divided into two. For substitution and augmentation levels they made similar comments. Their comments on the activities of modification and redefinition levels were also very much alike. This result supports the findings that when students were asked if the activities helped them understand and use English, their answers were similar for Substitution and Augmentation level, and they said activities helped them less while the activities for Modification and Redefinition levels, they said the activities were helpful.

Furthermore, their overall evaluation of the activities was divided into two. That is, their overall evaluation for Substitution and Augmentation level activities were respectively more negative while for modification and redefinition level the students were more positive. Hence, it can be concluded that this study supports the "enhancement" and "transformation" divide of the SAMR model. According to Puendetura (2006), the first two steps, which are categorized as enhancement, differ from the last two steps, which are categorized as transformation. It is clear from the comments of the students that they could conceive this division. Hockly (2013) found that learning activities at the transformation level has the full potential of learning when technology is integrated.

Having completed a reading activity at the Substitution level of the model integration, most of the participant students stated they would prefer books, pens, and paper. However, only one student stated his/her dislike of the activity. The comments show that although students liked the substitution level of technology integration, they thought it was not necessary to integrate technology when there is no functional change provided by it. For the augmentation level, although students claimed that they liked the activity, using technology was difficult for them. In this level, they were asked to use some additional tools of word processor instead of solely writing. For this activity, they preferred traditional activities, writing with a pen on paper instead of using keyboards and mobile devices. As a result, it could be possible to claim that during the enhancement phase students did not necessarily need technology integration nor they found it useful and helpful. The underlying reason for this might be that they did not make a great effort in terms of creating a task that would be impossible without technology and the audience was limited to the teacher.

In contrast to the first two levels, the last two levels, the Modification and Redefinition, were appreciated greatly by the students. The majority of the students stated that they had fun, they found it helpful and useful to use technology. They also stated that seeing each other's assignments and giving feedback was useful. They also stated that they liked Google Classroom and Blogging platforms. It is clear from these comments that when the audience was enhanced, the students' overall evaluation of the activities become more positive because they share their products with others and present themselves as language users. They might like being apparent as a language user. Furthermore, according to the SAMR Model, there is a significant task redesign and without technology these tasks are inconceivable in the last two levels. That is why students might not mention their preference for traditional tasks. On the contrary, they thought using technology was meaningful.

Last but not least, student satisfaction correlates with a positive attitude toward the teaching and learning activities and experiences implemented during the lessons. Lack of interaction is one of the main reasons for dissatisfaction of the students (Alsowat, 2016). The more students interact with each other, the higher their achievement is and also their attitude toward studying is affected positively (Alsowat, 2016). Modification and redefinition levels encourage more cooperative and collaborative contribution to the teaching and learning process. Therefore, it could be concluded that the transformation phase of the SAMR Model puts learners at the center of the focus and tries to improve the learning experience. Increasing interaction and cooperation also leads learners to improve their higher order thinking skills (HOTS). HOTS is related to transfer of learning, associated with critical thinking conceived by self-guided learning and reflective thinking as well as connected to problem solving (Wui et al., 2021). Students' positive perceptions towards the last two levels could possibly stem from the fact that these levels encourage more interaction with the material and peers, thus increasing satisfaction and engagement.Developing higher order thinking skills is a challenging task for teachers. However, it could be possibly resolved through the successful incorporation of information and communication technology. SAMR model of technology integration offers opportunities to develop higher order thinking skills as Puentedura (2014) stated that modification and redefinition levels of SAMR model are associated with HOTS in Bloom's taxonomy.

5.1. Pedagogical Implications

The results of the study may provide some pedagogical implications which are considered useful for the departments of language education. It is clear from the results and literature that being digital literate is not necessarily equal to being digital native. Therefore, when the English preparation school instructors would like to integrate a tool or a technology model into their language lessons, they should not assume that their students are digital literate because of their generation. The instructors should be aware of the difference between digital native and digital literate. It would be a good idea for them to assess their learners' digital literacy levels before implementing any kind of technology model or tool. If a lack of digital literacy is observed or if the digital literacy levels of the learners are not as high as expected, some supplementary activities should be given to students to raise their awareness.

According to the results of the current study, technology starts being useful at the last two steps of the SAMR model. Modification and Redefinition levels make things easier during the language learning process. However, at the first two levels, the existence of technology does not make a meaningful difference. At the last two levels, the students are led to utilizing more complex tools and apps while in the first two levels, the tools or apps that are utilized are simpler. They could survive without the help of technological solutions offered at the first two levels. Therefore, technology does not have to be integrated and used all the time. As long as technology provides achievement of the objectives of the lessons, it should be used. However, if traditional ways provide the achievement of the objectives of the lesson, it does not have to be integrated. In addition, the students gain a sense of achievement when they interact with others using the language they try to learn. Thus, sharing the products with peers and online communities increased the interest of the students towards the SAMR model of technology integration.

5.2. Suggestions for Future Research

It is clear from the results and literature that being digital literate is not necessarily equal to being digital native. It is recommended to investigate this situation in various contexts in the long term.

The reasons why students do not need technology and prefer traditional ways in the substitution and augmentation levels should be investigated in future studies on some other activities. Implementation of the model with some other activities may validate the results of the current study.

The sampling of the current study is limited. Therefore, the insights of the students could change if the sampling is expanded. Thus, the same study can be repeated on a more extended sample.

REFERENCES

Abu Bakar, N., Latif, H., & Ya'acob, A. (2010). *ESL Students feedback on the use of blogs for language learning, 3L The Southeast Asian Journal of English Language Studies*, *16* (1), 120-142.

Ackermann, E. (1996). *Constructionism in practice: Designing, thinking, and learning in a digital world*. Routledge.

Ahmadi, M. R. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, *3*(2), 115-125.

Al-Masri, E., & Mahmoud, Q. H. (2012). *MLDF: Discovering mobile learning content using mobile devices* [Paper Presentation]. The second international conference on communications and information technology, Hammaret, Tunisia.

Alsowat, H. (2016). An EFL flipped classroom teaching model: Effects on English language higher-order thinking skills, student engagement and satisfaction. *Journal of Education and Practice*, *7*(9), 108-121.

Armstrong, K., & Retterer, O. (2008). *Blogging as L2 writing: A case study. AACE Journal*, *16*(3), 233-251.

Autio, O., Hietanoro, J., & Ruismäki, H. (2011). *Taking part in technology education:Elements in students' motivation.* *International Journal of Technology and Design Education*, *21*(3), 349-361.

Bali, M. (2016, February 3). *ILA's Blog*. International Literacy Association. https://www.literacyworldwide.org/blog/literacy-now/2016/02/03/knowing-the-difference-between-digital-skills-and-digital-literacies-and-teaching-both.

Barron, A. E., Kemker, K., Harmes, C., & Kalaydjian, K. (2003). Large-scale research study on technology in K-12 schools: Technology integration as it relates to the national technology standards. *Journal of Research on Technology in Education*, *35*(4), 489.

Becker, H. J. (2000). Pedagogical motivations for student computer use that lead to student engagement. *Educational Technology*, *40*(5), 5-17.

Belshaw, D. (2011). *What is' digital literacy'. A pragmatic investigation.*(Doctoral dissertation Durham University).

Bloch, J., & Crosby, C. (2008). Blogging and academic writing development. *In Handbook of research on computer-enhanced language acquisition and learning* (pp. 36-47). IGI Global.Braine, George, ed. Teaching English to the world: History, curriculum, and practice. Routledge, 2014.

British Council. (2015). *Continuing Professional Development (CPD) Framework for* *teachers.*https://www.teachingenglish.org.uk/sites/teacheng/files/CPD_framework_for_teachers_WEB.PDF.

Bryman, A. (2006). *Integrating quantitative and qualitative research: how is it done? Qualitative research, 6*(1), 97-113.

Bull, S., & Ma, Y. (2001). *Raising learner awareness of language learning strategies in situations of limited resources. Interactive Learning Environments*, *9*(2), 171-200.

Cangil, B. (1999). Yabancı dil öğretiminde bilgisayar. *Yaşadıkça Eğitim Dergisi*, *64*, 26-29.

Clements, D. H., & Sarama, J. (2003). Strip mining for gold: Research and policy in educational technology—A response to "Fool's Gold". *AACE Journal, 11*(1), 7-69.

Creswell, J. W. (1999). *Mixed-method research: Introduction and application. In Handbook of educational policy* (pp. 455-472). Academic press.

Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE publications.

Creswell, J. W. (2016). Reflections on the MMIRA The Future of Mixed Methods Task Force Report. *Journal of Mixed Methods Research, 10*(3), 215–219. https://doi.org/10.1177/1558689816650298

Croker, R. A. (2009). An introduction to qualitative research. In *Qualitative research in applied linguistics* (pp. 3-24). Palgrave Macmillan, London.

Crystal, D. (1997). *Global English.*Cambridge University Press

Dalbotten, D., Ito, E., Myrbo, A., Pellerin, H., Greensky, L., Howes, T., ... & Yellowman, T. (2014). NSF-OEDG Manoomin Science Camp Project: A model for engaging American Indian students in science, technology, engineering, and mathematics. *Journal of Geoscience Education, 62*(2), 227-243.

Dey, I. (1993). *Qualitative data analysis: A user friendly guide for social scientists*. London: Routledge and Kegan Paul.

Dore, L., Geraghty, A., & O'Riordan, G. (2015). *Towards a national digital skills framework for Irish higher education: Review and comparison of existing frameworks and models.* University of Limerick. Retrieved from https://www.teachingandlearning.ie/wpcontent/uploads/NF-2016-Towards-a-NationalDigital-Skills-Framework-for-Irish-HigherEducation.pdf

Donnelly, H., & Kyei-Blankson, L. (2015). Administrator insights, evaluation, and support of new teacher use of educational technology. *Journal of Education and Training, 2*(1), 110-133.

Dörnyei, Z. (2001). New themes and approaches in second language motivation research. *Annual review of applied linguistics, 21*(1), 43.

Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.

Dudeney, G., & Hockly, N. (2009). *Learning English as a foreign language for dummies.* John Wiley & Sons.

Eady, M. J., & Lockyer, L. (2013). Tools for learning: technology and teaching strategies: *Learning to teach in the primary school.* Queensland University of Technology, Australia. pp. 71-89. https://scholars.uow.edu.au/display/publication76376

Ertmer, P. A., Richardson, J. C., Belland, B., Camin, D., Connolly, P., Coulthard, G., ... & Mong, C. (2007). Using peer feedback to enhance the quality of student online postings: An exploratory study. *Journal of Computer-Mediated Communication, 12*(2), 412-433.

Field, A. (2017). *Discovering Statistics Using IBM SPSS Statistics* (5th ed.). London: Sage Publications Ltd.

Ferrari, A. (2012). Digital competence in practice: An analysis of frameworks. *Sevilla:JRC IPTS.(DOI: 10.2791/82116).*

Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education* (Vol. 8). New York: McGraw-hill.

Galloway, N. (2017). ELF and ELT teaching materials. In *The Routledge handbook of English as a lingua franca* (pp. 468-480). Routledge.

Gardner, R.C. (1985). *Social psychology and second language learning: the role of attitutes and motivation.* London: Edward Arnold.

Gerich, D. (2013). Beyond the class blog: Creative and practical uses of Blogger for the ESL classroom. *TESOL Journal, 4*(1), 175-181.

Gilbert, J. A., Clark, D., & Roy, D. P. (2016). Blogging: what's all the fuss?. *SAM Advanced Management Journal, 81*(4), 4.

Gilster, P. (1997). *Digital literacy.* New York: Wiley Computer Pub.

Grabe, W., & Stoller, F. L. (2012). Teaching Reading: Foundations and Practices. *The Encyclopedia of Applied Linguistics,* 1-9.

Grami, G. M. A. (2012). Online Collaborative Writing for ESL Learners Using Blogs and Feedback Checklists. *English Language Teaching, 5(*10), 43-48.

Greisamer, M. (2016). Globalization and Tele-collaboration in Classroom Teaching and Learner Engagement: Japanese Perspective.

Hamilton, E. R., Rosenberg, J. M., & Akcaoglu, M. (2016). Examining the substitution augmentation modification redefinition (SAMR) model for technology integration. *Tech Trends, 60*(5), 433-441.

Harel, I., & Papert, S. (1991). *Constructionism. Norwood,* NJ: Ablex.

Harris, P. (2001). Goin Mobile Learning Circuits ASTD Magazine All about eLearning.

Harris, A. (2008). *Distributed school leadership: Developing tomorrow's leaders.* Routledge.

Hayes, N. (2000). *Foundations of psychology.* Thomson Learning.

Heitin, L. (2016). Digital Literacy: An Evolving Definition. https://www.edweek.org/ew/articles/2016/11/09/what-is-digital-literacy.html

Hilton, J. T. (2016). A case study of the application of SAMR and TPACK for reflection on technology integration into two social studies classrooms. *The Social Studies, 107*(2), 68-73.

Hockly, N. (2013). Technology for the language teacher: Mobile learning. *ELT Journal, 67*(1), 80–84. doi:10.1093/elt/ccs064

Howatt, A. P. R. (1984). Language teaching traditions: 1884 revisited. *ELT Journal, 38*(4), 279-282.

Howatt, A. P. R., & Widdowson, H. G. (2004). *A history of ELT.* Oxford University Press.

Howatt, A. P., & Smith, R. (2014). The history of teaching English as a foreign language, from a British and European perspective. *Language & History, 57*(1),75-95.

Howse, H. (1976). *The world is our classroom.* Education+ Training.

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

Huang, R., Spector, J. M., & Yang, J. (2019). *Educational Technology a Primer for the 21st Century.* Springer.

Ilter, B. G. (2015). How does technology affect language learning process at an early age?. *Procedia-Social and Behavioral Sciences, 199,* 311-316.

Incerti, F., Franklin, T., & Kessler, G. (2017). Amazon Echo: Perceptions of an Emerging Technology for Formal and Informal Learning. In Y. Baek (Ed.) *Game-Based learning: Theory,strategies and performance outcomes*. Nova Science publishers: Hauppauge, NY.

International Society for Technology in Education. (2007). *National educational technology standards for students*. ISTE (Interntl Soc Tech Educ.)

Isman, A. (2012). Technology and Technique: An Educational Perspective. *Turkish Online Journal of Educational Technology-TOJET, 11*(2), 207-213.

Ito, M., Horst, H., Bittanti, M., Boyd, D., Herr-Stephenson, B., Lange, P. G., … Tripp, L. (2008). *White paper - Living and learning with new media: Summary of findings from the Digital Youth Project*. Chicago, IL: The John D. and Catherine T. MacArthur Foundation.

Januszewski, A., & Molenda, M. (Eds.). (2013). *Educational technology: A definition with commentary*. Routledge.

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

Jonassen, D. H., & Reeves, T. C. (1996). Learning with technology: Using computers as cognitive tools. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 693–719). New York: Simon & Schuster.

Keegan, D. (2005, October). The incorporation of mobile learning into mainstream education and training. In *World Conference on Mobile Learning, Cape Town* (Vol. 11).

Kenar, İ., & Balcı, M. (2013). Öğrencilerin Derslerde Teknoloji Ürünü Kullanımına Yönelik Tutumu: Bir Ölçek Geliştirme Çalışması/Students' Attitudes towards Technology Use in the Lessons: A Scale Development Study. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 10(*22), 249-262.

Kennedy, G. E., Judd, T. S., Churchward, A., Gray, K., & Krause, K. L. (2008). First year students' experiences with technology: Are they really digital natives?. *Australasian journal of educational technology*, *24*(1).

Kessler, G., & Hubbard, P. (2017) Language teacher education and technology. *The handbook of technology and second language teaching and learning*, 278-292.

Kessler, G. (2018). Technology and the future of language teaching. *Foreign language annals, 51*(1), 205-218.

Kozma, R. (1994).Will media influence learning? Reframing the debate. *ETR&D, 42*(2), 7–19.

Larsen-Freeman, D., & Anderson, M. (2013). *Techniques and principles in language teaching 3rd edition-Oxford handbooks for language teachers.* Oxford university press.

Legris, P., Ingham, J., & Collerette, P. (2003). Why do people use information technology? A critical review of the technology acceptance model. *Information& management, 40*(3), 191-204.

Levy, D. (2017). Online, blended and technology-enhanced learning: Tools to facilitate community college student success in the digitally-driven workplace.

Liu, Z. (2005). Reading behavior in the digital environment: Changes in reading behavior over the past ten years. *Journal of documentation.*

Lobo, A. G., & Jiménez, R. L. (2017). Evaluating Basic Grammar Projects, Using the SAMR Model. *Letras*, (61), 123-151.

Lohnes, S. (2006). Using blogs in a college classroom: What's authenticity got to do with it. *Blogs for Learning.*

López, J. G., Royo, T. M., Laborda, J. G., & Calvo, F. G. (2009). Methods of adapting digital content for the learning process via mobile devices. *Procedia-Social and Behavioral Sciences*, *1*(1), 2673-2677.

Lynch, M. (2017). What is Digital Literacy. *The Tech Edvocate*.https://www.theedadvocate.org/what-is-digital-literacy/

Mantiri, O. (2019). Digital literacy in ESL classroom. *Universal Journal of Educational Research*, *7*(5), 1301-1305.

Macknight, F., & McGovern, I. J. (1983). Video and English language teaching in Britain. *Video applications in English language teaching*, 1-15.

McLeod, S. H. (2001). Writing Across the Curriculum in a Time of Change. https://wac.colostate.edu/books/millennium/chapter1.pdf/

Mısırlı, Z. A. (2016). Integrating technology into teaching and learning using variety of models. *IHEAD Ihlaraa Journal of Education, 1*(2), 37-48.

Mishra, P., & Koehler, M. J. (2008, March). Introducing technological pedagogical content knowledge. In *annual meeting of the American Educational Research Association* (pp. 1-16).

Murray, J. (2018). Technology in the classroom: What is digital literacy. *TeachHub*.com.

Myers, J., & Halpin, R. (2002). Teachers' attitudes and use of multimedia technology in the classroom: Constructivist-based professional development training for school districts. *Journal of Computing in Teacher Education*, *18*(4), 133-140.

Mynard, J. (2007, October). How blogging can promote learner autonomy. In *Proceedings of the Independent Learning Association 2007 Japan Conference: Exploring Theory, Enhancing Practice: Autonomy Across the Disciplines, Japan*.

Negari, G. M. (2011). A study on strategy instruction and EFL learners' writing skill. *International journal of English linguistics, 1*(2), 299.

Nelson, L. M. (1999). Collaborative problem solving. Instructional design theories and models: *A new paradigm of instructional theory, 2*(1999), 241-267.

Ng, W. (2012). Can we teach digital natives digital literacy?. *Computers & education, 59*(3), 1065-1078.

Nolen-Hoeksema, S., Fredrickson, B. L., Loftus, G. R., & Wagenaar, W. A. (2009). Atkinson & Hilgard's introduction to psychology. 15th. *Cengage Learning EMEA.* United Kingdom.

Noytim, U. (2010). Weblogs enhancing EFL students' English language learning. *Procedia-Social and Behavioral Sciences, 2*(2), 1127-1132.

Nurkamto, J. (2020). Integrating Technology into Elt Curriculum. *Proceedings Universitas Pamulang, 1*(1).

O'Byrne, I. W. (2016). *Perspectives of digital literacies.* https://www.literacyworldwide.org/blog%2Fliteracynow%2F2016%2F02%2F 03%2Fperspectives-of-digital-literacies

Ozer, O., & Kılıç, F. (2018). The effect of mobile-assisted language learning environment on EFL students' academic achievement, cognitive load and acceptance of mobile learning tools. *EURASIA Journal of Mathematics, Science and Technology Education, 14*(7), 2915-2928.

Pedersen, S., & Liu, M. (2003). Teachers' beliefs about issues in the implementation of a student-centered learning environment. *Educational Technology Research and Development, 51*(2), 57.

Perkins, D. N. (1986). *Knowledge as design.* Erlbaum.

Piaget, J. (1954). *The construction of reality in the child*. Ballantine.

Puentedura, R. R. (2006). Transformation, technology, and education. http://hippasus.com/resources/tte/puentedura_tte.pdf

Puentedura, R. R. (2013). SAMR: Getting to transformation.http://www.hippasus.com/rrpweblog/archives/2013/04/16/SAMRGettingToTransformation.pdf

Puentedura, R. R. (2015). SAMR: A brief introduction. unpublished. http://hippasus.com/rrpweblog/archives/2015/10/SAMR_ABriefIntro.pdf

Prensky, M. (2001). Digital natives, digital immigrants part 2: Do they really think differently?. *On the horizon.*

Raman, K., & Yamat, H. (2014). Barriers Teachers Face in Integrating ICT During English Lessons: A Case Study. Malaysian *Online journal of educational technology, 2*(3), 11-19.

Reinders, H., & Hubbard, P. (2013). CALL and learner autonomy: Affordances and constraints. *Contemporary computer assisted language learning,* 359-375.

Reuse-Durham, N. (2005). Peer Evaluation as an Active Learning Technique. *Journal of Instructional Psychology, 32*(4).

Romrell, D., Kidder, L., & Wood, E. (2014). The SAMR model as a framework for evaluating mLearning. *Online Learning Journal, 18*(2).

Rosen, D., & Nelson, C. (2008). Web 2.0: A new generation of learners and education. *Computers in the Schools*, *25*(3-4), 211-225.

Rowe, C. M. (2014). Teacher behavior in the digital age: A case study of secondary teachers' pedagogical transformation to a one-to-one environment (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3582610)

Rubin, A., & Babbie, E. (2008). *Research methods for social work* . Belmont, CA: Brooks.

Savignano, M. A. (2017). Educators' perceptions of the substitution, augmentation, modification, redefinition model for technology integration (Order No. 10623033). Available from ProQuest Dissertations & Theses A&I.(1970074923).

Schrock, K. (2013). *Resources to support the SAMR Model. Kathy Schrock's guide to everything.*

Schrock, K. (2016). Bloom's, SAMR, and Beyond: A Practical Guide for Tech Integration. *Tech Your Teaching.*

Smith, G. H. (2009). Voices from the Field: Obtaining, Processing, and Constructing English: Blogging in the ESL Classroom. *Journal of Media Literacy Education, 1*(1), 75-80.

Sotillo, S. M. (2000). Discourse functions and syntactic complexity in synchronous and asyncronous communication. *Language learning & technology, 4*(1), 77-110.

Sun, Y. C. (2010). Extensive writing in foreign-language classrooms: A blogging approach. *Innovations in Education and Teaching International*, *47*(3), 327-339.

Sung, Y. T., Chang, K. E., & Yang, J. M. (2015). How effective are mobile devices for language learning? A meta-analysis. *Educational research review*, 16, 68-84.

Stanley, G. (2013). *Language learning with technology: Ideas for integrating technology in the classroom*. Cambridge University Press.

Stoop, J., Kreutzer, P., & Kircz, J. (2013). Reading and learning from screen versus print: A study in changing habits; Part 1. *New Library World*, 114, 284–300. doi:10.1108/NLW-01-2013-0012

Tapscott, D. (2008). Grown up digital. Boston: *McGraw-Hill Education. Communication, 7*(2), 128-136.

Teo, T. (2014). Unpacking teachers' acceptance of technology: Tests of measurement invariance and latent mean differences. *Computers & Education*, 75, 127-135.

Tomalin, B. (1979) *105 the Use of the Media in English Language Teaching.* British Council.

Ustundag, A., & Cevikcan, E. (2017). Industry 4.0: managing the digital transformation. Springer.

Van den Boom, G., Paas, F., & Van Merrienboer, J. J. (2007). Effects of elicited reflections combined with tutor or peer feedback on self-regulated learning and learning outcomes. *Learning and Instruction*, *17*(5), 532-548.

Harmes, J. C., Welsh, J. L., & Winkelman, R. J. (2016). A framework for defining and evaluating technology integration in the instruction of real-world skills. In *Handbook of research on technology tools for real-world skill development* (pp. 137-162). IGI Global.

Yousuf, M. I. (2007). Effectiveness of mobile learning in distance education. *Turkish online journal of Distance Education*, *8*(4), 114-124.

Yuan, C., Wang, L., & Eagle, J. (2019). Empowering english language learners through digital literacies: Research, complexities, and implications. *Media and Communication*, *7*(2), 128-136.

Wui, J. L. L., Syn, G. W. L., & Yunus, M. M. (2021, June) *Using WeChat in Developing Students' Higher Order Thinking Skills (HOTS) in Learning the Novel "Captain Nobody"* [Paper Presentation]. InIIC 2021: Senawang, Negeri Sembilan, Malaysia.

APPENDICES

APPENDIX 1: Digital Literacy Scale (Üstündağ et al., 2017)

	DİJİTAL OKURYAZARLIK ÖLÇEĞİ	Tamamen Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
1	Kullandığım teknolojilerle ilgili karşılaştığım teknik problemleri nasıl çözeceğimi bilirim.					
2	Yeni teknolojileri kolayca öğrenebilirim.					
3	Önemli yeni teknolojileri takip ederim.					
4	Birçok farklı teknoloji hakkında bilgi sahibiyim.					
5	Bilgi ve iletişim teknolojilerini öğrenme amaçlı kullanma konusunda ve öğrendiklerimi sergileyebileceğim dijital öğretim materyallerini geliştirmek için gereken teknik becerilere sahibim.					
6	Bilgi ve iletişim teknolojileri konusunda sahip olduğum beceriler yeterlidir.					
7	İnternetten bilgi edinmek için yaptığım arama ve değerlendirmelerde kendime güvenirim.					
8	Siber güvenlik, webde arama ve internette sahtecilik vb. internet etkinlikleri ile ilgili konulara aşinayım.					
9	Bilgi ve iletişim teknolojileri, bir projede çalışma ve diğer öğrenme etkinlikleri konusunda akranlarımla daha iyi iş birliği yapmamı sağlar.					
10	Üniversitedeki çalışmalarımda, arkadaşlarımla internet üzerinden sıklıkla yardımlaşırım.					

APPENDIX 2: Students' Attitudes Towards Technology Use in the Lessons (Kenar & Balcı, 2013)

	Yönerge: Bu ölçekte, teknolojiye yönelik tutumunuzla ilgili ifadeler bulunmaktadır. Bu ifadeler, "tamamen katılıyorum" ile "hiç katılmıyorum" arasında değerlendirilmiştir. Lütfen sizin için en uygun olan dereceyi kurşun kalemle doldurunuz. Ölçeği eksiksiz olarak doldurmaya özen gösteriniz. Bu ankete verdiğiniz cevaplar, yalnızca akademik amaçla ve kişisel bilgileriniz kullanılmadan değerlendirilecektir. Araştırmaya katkılarınızdan dolayı çok teşekkür ederiz. **TEKNOLOJİYE YÖNELİK TUTUM**	Tamamen Katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
1	Derslerde kullanılan teknoloji benim bilimsel becerilerimi arttırır.					
2	Derslerde teknoloji kullanılması, konuları daha iyi öğrenmeme yardımcı olur					
3	Derslerde teknolojinin kullanılmasından hoşlanırım					
4	Derslerde teknoloji verimli bir şekilde kullanabilirim.					
5	Derslerde teknolojinin kullanılması ders başarımı arttırır.					
6	Derslerde teknolojinin kullanılması, dikkatimin dağılmasına sebep olur.					
7	Derslerde teknoloji kullanırken kendimi yetersiz hissederim.					
8	Derslerde teknoloji kullanmak, öğrenmemi zorlaştırır.					
9	Derslerde teknoloji kullanılmasının başarıma olumlu bir katkısı yoktur.					
10	Derslerde teknoloji kullanılması beni endişelendirir.					
11	Derslerde teknoloji kullanımında kendime güvenirim.					
12	Derslerde teknoloji kullanılırken kendimi çaresiz hissederim.					
13	Derslerde teknolojiyi başarılı bir şekilde kullanamam.					
14	Teknoloji ile güncel hayattan örnekler verilmesi derse yönelik ilgimi arttırır.					

APPENDIX 3: The Mobile Learning Tools Acceptance Scale (Özer & Kılıç, 2018)

	Yönerge: Bu ölçekte, mobil öğrenme araçları kabulunuz ilgili ifadeler bulunmaktadır. Bu ifadeler, "bana hiç uymuyor" ile "bana tamamen uyuyor" arasında değerlendirilmiştir. Lütfen sizin için en uygun olan dereceyi kurşun kalemle doldurunuz. Ölçeği eksiksiz olarak doldurmaya özen gösteriniz. Bu ankete verdiğiniz cevaplar, yalnızca akademik amaçla ve kişisel bilgileriniz kullanılmadan değerlendirilecektir. Araştırmaya katkılarınızdan dolayı çok teşekkür ederiz. **MOBİL ÖĞRENME ARAÇLARI KABUL ÖLÇEĞİ**	Bana hiç uymuyor	Bana çok az uyuyor	Bana orta derecede uyuyor	Bana uyuyor	Bana tamamen uyuyor
1	Mobil araçları kullanmak öğrenmemi geliştirir.					
2	Mobil aracı öğrenme amacıma uygun olarak kullanmak benim için kolaydır.					
3	Yabancı dil öğrenimine ilişkin yeni bir mobil araç uygulaması duyduğumda indirip kullanmayı heyecanla beklerim.					
4	Mobil aracın bir dersin içeriğini çalışmayı kolaylaştırdığını düşünüyorum.					
5	Mobil araçla çalışmak eğlencelidir.					
6	Dil öğrenirken sözcük öğreniminde mobil araç yoluyla öğrenmeyi geleneksel yöntemle öğrenmeye çoğu zaman tercih ederim.					
7	Öğretmenim kullanımını serbest bırakması halinde, mobil aracımı derste kullanmayı isterim.					
8	Mobil aracımı ders içi ve dışında etkili kullanmama karşın sınavlarda olması gereken başrıyı yakalayamıyorum.					
9	Yabancı dil öğrenimi ile ilgili yeni bir uygulama indirdiğim zaman nasıl kullanılacağını kolayca öğrenirim.					
10	Dersin işlenişini mobil araçlara da uygun olacak şekilde tasarlayan öğretmenlerimin dersinde, sıklıkla mobil aracımı kullanırım.					
11	Mobil aracımı yabancı dil öğrenme sürecimde kullanmak beni akademik anlamda daha başarılı bir öğrenci yapmaktadır.					
12	Mobil araç derste dikkatimi vermemi güçleştirmektedir.					
13	Dili öğrenirken mobil araç kullandığım durumları sabırsızlıkla beklerim.					
14	Mobil aracın not alma becerilerimde olumlu bir etkisi olmaktadır.					
15	Mobil aracım konuşma becerilerimi geliştirmeme yardım etmektedir.					
16	Mobil araç kullanmak benim derslerdeki etkililiğimde önemli bir değişikliğe yol açmaktadır.					
17	Arkadaşlarım beni mobil araç kullanmaya yöneltmemektedir.					
18	Mobil araç kullanmak benim için zordur.					
19	Mobil araç kullanımı benim yabancı dilde ürünler ortaya koymamda üretkenliğimi artırır.					

APPENDIX 4: Demographic Inventory

Sayın Katılımcı,

Bu çalışma Ufuk Üniversitesi-İngiliz Dili Eğitimi Bölümü'nde yürütülen bir araştırmadır.

Bu çalışmaya katılım tamamen gönüllük esasına dayalıdır. Eğer katılmayı kabul ederseniz, sizden konuyla ilgili bazı ölçekleri doldurmanız istenecektir. Lütfen soruları olması gerektiğini düşündüğünüz biçimde değil, sizin düşüncelerinizi tüm gerçekliği ile yansıtacak biçimde cevap veriniz. Samimi ve içtenlikle vereceğiniz cevaplar çalışmanın sağlığı açısından çok önemlidir.

Sizden hiçbir kimlik belirleyici hiçbir bilgi istenmeyecektir. Cevaplarınız sadece araştırmanın amacına uygun olarak bilimsel açıdan kullanılacak ve gizli tutulacaktır.

Bu çalışmaya katılmayı kabul edebilir, reddedebilirsiniz ayrıca çalışmanın herhangi bir yerinde onayınızı çekme hakkına da sahipsiniz. Ancak soruları sonuna kadar ve eksiksiz cevaplamanız, bu araştırmanın geçerli olabilmesi için önem taşımaktadır.

Çalışma ile ilgili herhangi bir bilgi almak isterseniz, aşağıdaki elektronik iletişim adresinden ulaşabilirsiniz.

Araştırma Koordinatörü: Prof. Dr. Meltem Huri Baturay

e-posta adresi:

Araştırmacı: Merve AYDIN

e-posta adresi:

Katılımınız ve ayırdığınız vakit için şimdiden teşekkür ederiz.

Katılımcı beyanı:

Araştırma ile ilgili yukarıdaki bilgiler bana aktarıldı. Bana yapılan tüm açıklamaları ayrıntılarıyla anlamış

bulunmaktayım. Verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum. Bu araştırmada 'katılımcı' olarak yer alma kararını aldım.

İsim Soyad:

İmza:

NOT: Bilgi ve kontak adresleri kısmı kesilerek sizlere verilecektir. İmza ve isim sadece çalışmaya gönüllü olarak katıldığınızı gösterir niteliktedir. Cevaplarınız size verilmeden teslim alınacak ve ayrı olarak tutulacaktır.

Demografik Bilgiler;

Doğum yılınız:

Cinsiyetiniz:

Mezun olduğunuz lise türü:
- Düz lise (Yabancı dil ağırlıklı olmayan)
- Anadolu/ Fen lisesi (Yabancı dil ağırlıklı)
- Özel (Yabancı dil ağırlıklı Kolej)
- Teknik/Sanat/Mesleki liseler (Yabancı dil ağırlıklı olmayan)
- Teknik/Sanat/Mesleki liseler (Yabancı dil ağırlıklı)
- Diğer(Lütfen belirtiniz): …………………………………………..

APPENDIX 5: Students' Perceptions towards Substitution Activity (adapted by Lobo & Jimenes, 2017)

A. How did **reading on Google Forms** help you understand English and practice English language skills?

1. Very much 2. More or less 3. Not so much 4. Not at all

B. In what way?

a. By using technology as a tool to directly substitute hard copy practice.
b. By using technology as a tool to substitute tasks and enable using functional features.
c. By redesigning the presentation of the task, through the use of technology, to enhance the learning outcome and to get peer feedback.
d. By creating, with the use of technology, new tasks which would be impossible without technology.

C. How was the overall evaluation in the **reading on Google Forms** perceived by you?

1. Appropriate 2. Good 3. Fair 4. Poor

D. Do have any more comments? Please write down in either in Turkish or English ☺

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
….

APPENDIX 6: Students' Perceptions towards Augmentation Activity (adapted by Lobo & Jimenes, 2017)

A. How did **writing assignment** help you understand English and practice English language skills?

1. Very much   2. More or less   3. Not so much   4. Not at all

B. In what way?

a. By using technology as a tool to directly substitute hard copy practice.
b. By using technology as a tool to substitute tasks and enable using functional features.
c. By redesigning the presentation of the task, through the use of technology, to enhance the learning outcome and to get peer feedback.
d. By creating, with the use of technology, new tasks which would be impossible without technology.

C. How was the overall evaluation in the **writing assignment** perceived by you?

1. Appropriate   2. Good   3. Fair   4. Poor

D. Do have any more comments? Please write down in either in Turkish or English ☺

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
….

APPENDIX 7: Students' Perceptions towards Modification Activity (adapted by Lobo & Jimenes, 2017)

A. How did **sharing your article to get and give peer feedback** help you understand English and practice English language skills?

1. Very much 2. More or less 3. Not so much 4. Not at all

B. In what way?

a. By using technology as a tool to directly substitute hard copy practice.
b. By using technology as a tool to substitute tasks and enable using functional features.
c. By redesigning the presentation of the task, through the use of technology, to enhance the learning outcome and to get peer feedback.
d. By creating, with the use of technology, new tasks which would be impossible without technology.

C. How was the overall evaluation in the **sharing your article to get and give peer feedback** perceived by you?

1. Appropriate 2. Good 3. Fair 4. Poor

D. Do have any more comments? Please write down in either in Turkish or English ☺

……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
……………………………………………………………………………………
….

APPENDIX 8: Students' Perceptions towards Redefiniton Activity (adapted by Lobo & Jimenes, 2017)

A. How did **blogging activity** help you understand English and practice English language skills?

1. Very much   2. More or less   3. Not so much   4. Not at all

B. In what way?

a. By using technology as a tool to directly substitute hard copy practice.
b. By using technology as a tool to substitute tasks and enable using functional features.
c. By redesigning the presentation of the task, through the use of technology, to enhance the learning outcome and to get peer feedback.
d. By creating, with the use of technology, new tasks which would be impossible without technology.

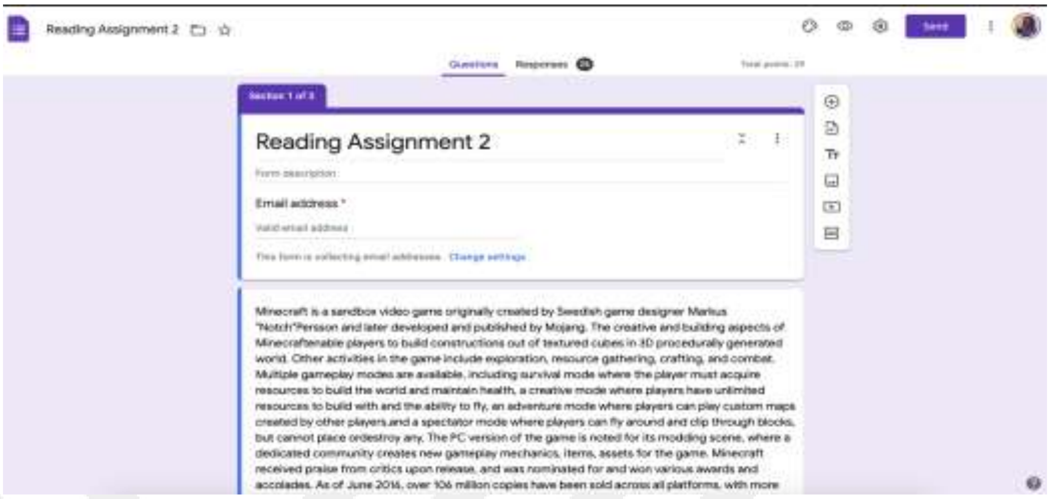
C. How was the overall evaluation in the **blogging activity** perceived by you?

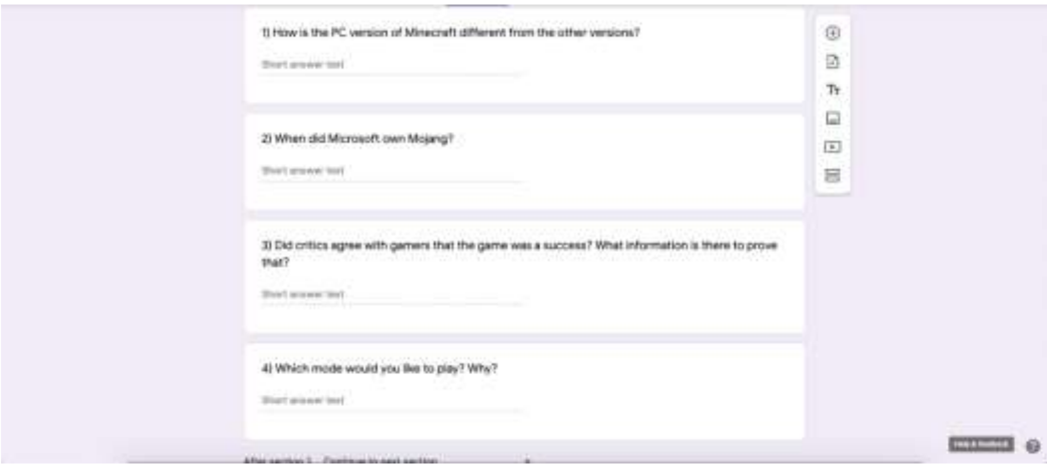
1. Appropriate   2. Good   3. Fair   4. Poor

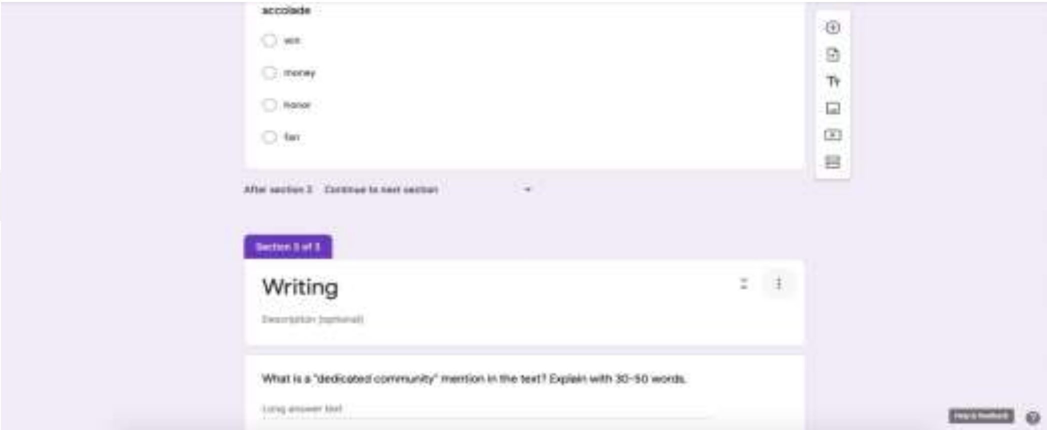
D. Do have any more comments? Please write down in either in Turkish or English ☺

………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
………………………………………………………………………………
….

APPENDIX 9: Substitution Activity




1) How is the PC version of Minecraft different from the other versions?
2) When did Microsoft own Mojang?
3) Did critics agree with gamers that the game was a success? What information is there to prove that?
4) Which mode would you like to play? Why?


accolade
win
money
honor
fan
Section 3 of 3
Writing
What is a "dedicated community" mention in the text? Explain with 30-50 words.

APPENDIX 10: Augmentation Activity

All around the world, a lot of people try various ways to improve their communication skills. One of such ways is using social media for that. Some people think that using social media provides many conveniences in their lives like meeting with the other people easily and talking with our old friends or families on the social media, whereas some others think the opposite. They say:" Social media is not a good way to improve people communicate. Quite the reserve, it really prevents these kinds of things." I agree with the idea that using social media can be advantageous for people.

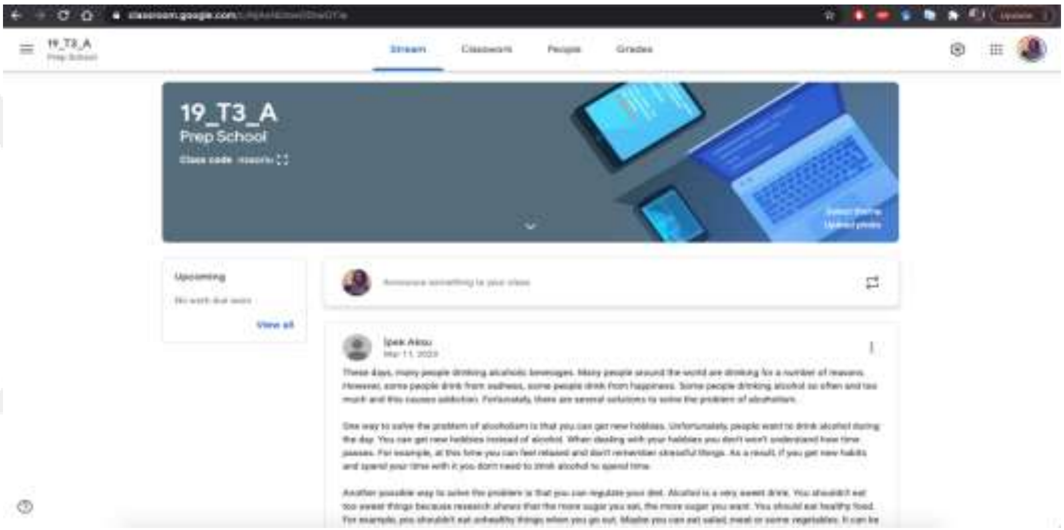
First of all, using social media can be helpful to make new friends. Nowadays, lots of people have a social media account and people can send messages on the social media. Also, they are able to stay in touch with each other. For example, I have got some friends on the social media, and we are really close friends. I am happy because of that.

Secondly, as you know, many people can be informed about each other with the help of the social media. They can support someone, and they can help out to the others in the emergency situations. For instance, in the near future there was an earthquake in Elazığ. Everyone tried to help, and many people donated money. As much as they could, they sent something to people in Elazığ such as food, beverage, clothing etc.

Last but not least, using social media is useful to find people's old friends. People can connect with them quickly and they can start to communication. For example, when I was a young, I and my friends did not have a mobile phone number or social media accounts. Some of us changed their school, some others went out of town. I lost communication with them because of that. But with the help of social media, we arranged a meeting and we started to meet again.

As you can see, using social media has many advantages to improve the way people communicate like making new friends, getting some news from the other people and finding people's old friends easily. Therefore, I agree that using social media is beneficial for the people.

APPENDIX 11: Modification Activity



Ercan Özalp
Mar 10, 2020

Nowadays,there are lots of applications to use in several ways.One of the ways is learning language.For example Oxford Vocab trainer is for learning new vocabulary about a new language that you want to learn.Some people think that it's good but some other people prefer traditional ways like teacher who teaches them.I agree with the idea that mobile applications helps students to learn a new language for some reasons.

Firstly,you can do extra exercises on applications.When your teacher teaches you something,sometimes you can't understand or you understand something very well and you want to do more exercises.So you can open up the applications and you can do extra exercises.

Secondly,you can find many resources.I think sometimes teachers' knowledge and resources are limited but in the mobile applications the developers put nearly everything about what the applications have made for.So this means they are nearly unlimited and that you can have nearly unlimited resources.

Last but not least,it's easy to find whatever you want on mobile applications.Some people prefer the traditional ways like look at words which they want to learn their meaning in dictionary and I think it's not necessary.You can just write the word and the application shows you the meaning of the word that you want to learn.

Taking everything into account,mobile applications help students to learn a new language and I also agree with that because it's easy to find whatever you want,you can find many resources and you can do extra exercises.

2 class comments

Cemile Karakurt Mar 10, 2020
Excellent :))

Rao Ryuken Mar 10, 2020
I think, introduction can be a bit improved

Yusuf Demir
Mar 5, 2020

Problem solution essay

FUTURE OF TURKISH FOO...
Word

6 class comments

ilker baksı Mar 10, 2020
I think your body paragraphs should be more developed.

Batuhan Bozkurt Mar 10, 2020
Good job. It is a very hard topic.
You made it well.

Cemre Bedia Özcan Mar 10, 2020
I think you should write more. I'd love to read them. :)

Cemile Karakurt Mar 10, 2020
Good job i liked it :)

Alieren Kocamaz Mar 10, 2020
Yousef your essay neraly perfect but it istop short.

Furkan Babuccu Mar 10, 2020
You mentioned very right issues.

APPENDIX 12: Redefinition Activity

Dear student,
The main aim of this assignment is to prepare a class blog including a **200-250 words text,** use at least **3 photos-drawings** to enrich the content, upload a **2 minute video of your own** talking about the topic.

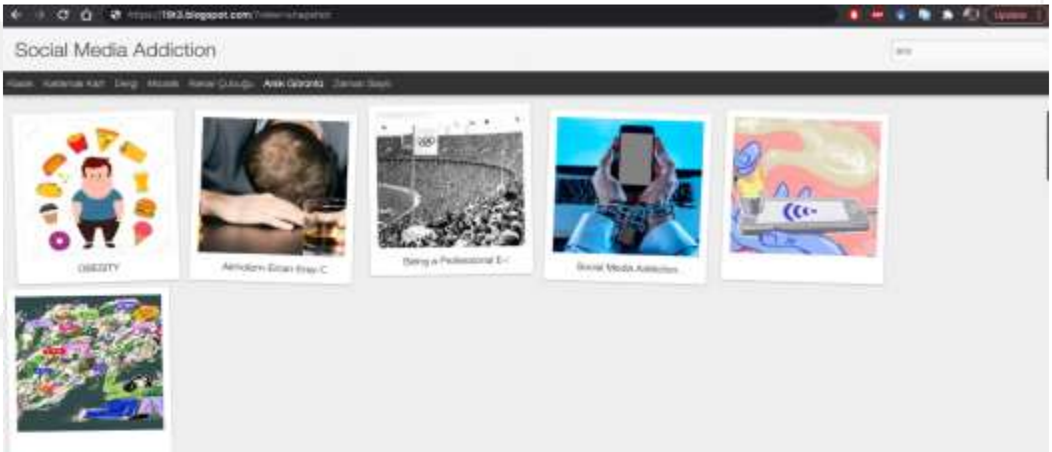
So first of all please go to www.blogger.com and sign up if you do not have an account.

Share **your ideas** about a topic - you can use your own essays for the content.
For example;

- your topic is forest fires- put some photos related to the topic and explanations of the photos should be between 50 to 100 words.
- add one more post discussing reasons and results of the forest fires (could be either a video production **or** an essay)
- add one another post including only your ideas on how to prevent forest fires. (could be either a video production **or** an essay)
- text should be 200 words- video should be 2 minute talk.

On the left you will see setting part for your posts, please **allow reader comments.**

Good luck and have fun!



APPENDIX 13: Rubrics

Rubric and Answer Key for Substitution Activity

Section 1 (2 points each)

A1: The PC version of the game is noted for its modding scene, where a dedicated community creates new gameplay mechanics, items, assets for the game.
A2: In September 2014
A3: Yes, Minecraft received praise from critics upon release and was nominated for and won various awards and accolades.
A4: Answers may vary

Section 2 (2 points each)

A5: created
A6: conserve
A7: honor

Section 3 (4 points)

A group of people who contributes to the game

Rubric for Modification Activity

Sharing a post including a paragraph or an essay = 4 points
Giving peer feedback to 3 classmates = 6 points (2 points for each feedback)

Rubric for Redefinition Activity

Text: 10 points
Video: 10 points

		Full Agreement		Partial Agreement		No
A.	The output fits to the task.	3	2	1.5	0,75	0
B.	The output shows high amount of creativity.	3	2	1.5	0,75	0
C.	The language meets level expectation.	2	1.5	1	0.5	0
D.	Vocabulary meets level expectation.	2	1.5	1	0.5	0

Rubric for Augmentation Activity

	Thesis Statement	Body Paragraphs	Introduction & Conclusion Paragraphs	Organization	Language & Mechanics
Good	**(2)** • Has a well-written thesis statement that states the opinion clearly. • Does not give an extra/irrelevant idea which is not asked in the prompt.	**(10-9)** • There are at least two body paragraphs. • Each body paragraph starts with a clear/efficient topic sentence. • There is coherence between the supporting details and the examples. • There is no irrelevant information.	**(5-4)** • Has a clear and complete introduction and conclusion paragraph. • Narrows down his/her ideas in the introduction part. • Restates the opinion using different wording in the conclusion. • Does not present a new idea in the conclusion part.	**(3)** • The essay is unified, coherent, and logical. • Details are in logical order and the essay keeps the reader interested. • Explanations/examples are stated after the supporting details.	**(10-8)** • Has accurate/effective use of language. (Level-appropriate structures) • Uses a rich and varied vocabulary. • Has a good use of punctuation and transition devices.
Average	**(1)** • Does not clearly state the opinion related to the topic. • There are extra ideas that were not asked in the prompt.	**(8-6)** • There are two body paragraphs without any/ proper topic sentences. • There is only one body paragraph. • Reasons are elaborated with examples to an extent or only one reason is followed by an example. • Supporting details and examples/ explanations are somewhat coherent/ relevant.	**(3-2)** • Has somewhat clear and complete introduction and conclusion paragraphs. • Does not properly narrow down the ideas in the introduction part. • Restates the opinion without a successful paraphrasing in the conclusion. • Presents a new idea that is not mentioned in the supporting details.	**(2)** • The essay is mainly unified, coherent and logical. • Some details are sometimes not in logical order. The reader may get distracted. • Explanations are not always stated after the supporting details.	**(7-4)** • Has some problems in use of language. (partially and roughly level-appropriate structures) • Uses somewhat varied vocabulary. • Has some problems in the use of punctuation and transition devices.
Poor	**(0,5-0)** • Does not state an opinion related to the topic. • There is no thesis statement.	**(5-0)** • Insufficient/ irrelevant reasons to support the topic sentence or no supporting details at all. • Supporting details are mentioned but not backed up with any examples/facts or backed up with irrelevant examples. • There is no clear transition between the supporting details and the examples.	**(1-0)** • Has weak/unclear introduction and conclusion paragraphs. • No introduction and conclusion paragraphs.	**(1-0)** • The essay is not unified and coherent and does not make sense. • Details are not in logical or expected order. • Explanations are irrelevant and do not follow the supporting detail.	**(3-0)** • Has limited or poor choice of vocabulary. • Has language in which inaccuracy impedes meaning. • Has major problems in the use of punctuation and transition devices.

*** The final draft of opinion essay will be evaluated over 30 points.**

ÖZGEÇMİŞ

Kişisel Bilgiler

Adı Soyadı: Merve Aydın

Eğitim Durumu

Lisans Öğrenimi: Orta Doğu Teknik Üniversitesi

Öğrenimi: İngilizce Öğretmenliği

Bildiği Yabancı Diller: İngilizce

İş Deneyimi

Çalıştığı Kurumlar: Amerikan kültür Derneği (İngilizce Öğretmeni – Ankara, Meşruriyet Şubesi)

TOBB YDYO Temel İngilizce Birimi (Yarı zamanlı Okutman)

Atılım YDYO Temel İngilizce Birimi (Öğretim Görevlisi- Eğitim Teknoloji Birimi Üyesi)

Tarih: 29.06.2021