REPUBLIC OF TURKEY
ÇAĞ UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
DEPARTMENT OF ENGLISH LANGUAGE EDUCATION

EXPLORING EFL TEACHERS' PERCEPTIONS ON 21ST CENTURY SKILLS: A CASE STUDY

THESIS BY
Ecem EKER

Supervisor : Prof. Dr. Hasan BEDİR (Çukurova University)
Member of Jury: Prof. Dr. Şehnaz ŞAHİNKARAKAŞ
Member of Jury: Dr. Seden TUYAN

MASTER OF ARTS

MERSİN / JUNE 2020

APPROVAL

REPUBLIC OF TURKEY

ÇAĞ UNIVERSITY

DIRECTORSHIP OF THE INSTITUTE OF SOCIAL SCIENCES

We **certify** that thesis under the title of "**Exploring EFL Teachers' Perceptions on 21st Century Skills: A Case Study** " which was prepared by our student **Ecem EKER** with number **20188008** is satisfactory **consensus** for the award of the degree of **Master of Arts** in the Department of **English Language Education**.

(The Original Copy Hold in the Institute Directorate is Signed.)
Univ. Outside –Supervisor - Head of Examining Committee: Prof. Dr. Hasan BEDİR
(Çukurova University)

(The Original Copy Hold in the Institute Directorate is Signed.)
Univ. Inside – Member of Examining Committee: Prof. Dr. Şehnaz ŞAHİNKARAKAŞ

(The Original Copy Hold in the Institute Directorate is Signed.)
Univ. Inside - Member of Examining Committee: Dr. Seden TUYAN

I confirm that the signatures above belong to the academics mentioned.

(The Original Copy Hold in the Institute Directorate is Signed.)

12 / 06 / 2020

Assoc. Prof. Dr. Murat KOÇ
Director of Institute of Social Sciences

Note: The uncited usage of the reports, charts, figures and photographs in this thesis, whether original or quoted for mother sources is subject to the Law of Works of Arts and Thought. No: 5846.

DEDICATION

To my beloved family...

ETHICS DECLARATION

Name & Surname : Ecem EKER
Number : 20188008
Department : English Language Education
Program : Master's Thesis (x) Ph. D. Thesis ( )
Thesis Title : Exploring EFL Teachers' Perceptions on 21st Century Skills: A Case Study

I hereby declare that;
I prepared this master thesis in accordance with Çağ University Institute of Social Sciences Thesis Writing Directive,
I prepared this thesis within the framework of academic and ethics rules,
I presented all information, documents, evaluations and findings in accordance with scientific ethical and moral principles,
I cited all sources to which I made reference in my thesis,
The work of art in this thesis is original,
I hereby acknowledge all possible loss of rights in case of a contrary circumstance. (In case of any circumstance contradicting with my declaration)

12.06.2020
Ecem EKER

ACKNOWLEDGEMENTS

First of all, I would like to express my gratitude Prof. Dr. Hasan BEDİR, my supervisor, my thesis advisor, and my guide, for his everlasting support, valuable guidance and encouragement during this study.

I want to thank warmly to all my M.A. instructors, Şehnaz Şahinkarakaş, Seden Tuyan, Jülide İnözü and Zehra Köroğlu for their unique guiding light through my professional development process.

In addition, I express my special gratitude to my esteemed friend Michael William DAVIS for his constant encouragement and precious support throughout my research period.

I owe a lot to my dear family, my mother Buket EKER, my father Mehmet Metin EKER and my brother Osman EKER, they were always there to support me during my busy and stressful days, they encouraged, believed and motivated me to overcome all of the challenges I encountered in the process.

I would like to thank to my dear friend Hilal YÖNLÜ for her support for overcoming obstacles I faced during my research.

I owe special thanks to my colleagues and my school for their endless support throughout this study and my administrators who gave a hand when I was in need.

12.06.2020

Ecem EKER

ABSTRACT

EXPLORING EFL TEACHERS' PERCEPTIONS ON 21ST CENTURY SKILLS: A CASE STUDY

Ecem EKER

Master Thesis, Department of English Language Education
Supervisor: Prof. Dr. Hasan BEDİR
June 2020, 102 Pages

The purpose of this study is to investigate English language teachers' perceptions and pedagogical implementations of the 21st century learning and innovation skills. For this purpose, 105 English language teachers participated in the questionnaire and 10 English language teachers participated in interviews, they attended a seminar to complete a chart about the study and they were asked to prepare a lesson plan including 21st century skills with a reflection paper after their lessons.

An exploratory case study was employed for this aim. In order to collect data, both qualitative and quantitative methods were used. In order to choose participants, convenience sampling was used. The findings of the study defined and discussed in accordance with the research questions at the results chapter in order to shed a light on further researches.

It is presented that English language teachers who participated in the study are aware of the importance of 21st century learning and innovation skills and they have the knowledge of them. However, they need to be supported by their administrators and the government to improve and broaden their horizons about when and how to apply these skills.

Keywords: 21st century Learning and Innovation Skills, Communication, Collaboration, Creativity, Critical thinking, Digital Literacy Skills, Life and Career Skills, Professional Development.

ÖZET

YABANCI DİL OLARAK İNGİLİZCE ÖĞRETMENLERİNİN 21.YÜZYIL BECERİLERİNE YÖNELİK ALGILARI: BİR DURUM ÇALIŞMASI

Ecem EKER

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı
Tez Danışmanı: Prof. Dr. Hasan BEDİR
Haziran 2020, 102 Sayfa

Bu çalışmanın amacı İngiliz Dili öğretmenlerinin 21.yüzyıl öğrenme ve yenilikçi becerilerinin algılarını ve sınıf içi pedagojik uygulamalarını incelemektir. Bu amaç doğrultusunda, 105 İngilizce öğretmeni ankete katılmıştır ve 10 İngilizce öğretmeni röportaja katılmıştır, yine aynı 10 İngilizce öğretmeni bir tablo doldurmak üzere seminere katılım göstermişlerdir ve 21.Yüzyıl öğrenme ve yenilikçi becerilerini içeren bir ders planı hazırlamaları ve derslerinden sonra bir geri dönüt belgesi hazırlamaları istenmiştir.

Keşifsel durum çalışması deseni bu amaç için kullanılmıştır. Veri toplamak için, hem nicel hem nitel metotlar kullanılmıştır. Katılımcıları seçmek için, herhangi bir özel kriter kullanılmamıştır. Gelecekteki araştırmalara ışık tutmak amacıyla çalışmanın bulguları sonuçlar bölümünde tanımlanmış ve tartışılmıştır.

Katılan İngilizce öğretmenlerinin 21.Yüzyıl öğrenme ve yenilikçi becerilerinin farkında olduğu ve bu konuda bilgi sahibi olduğu ortaya çıkmıştır. Fakat, idarecileri ve devlet tarafından bu becerileri ne zaman ve nasıl uygulayacakları konusunda gelişmeye ve ufuklarını açmaya ihtiyaç duymaktadırlar.

Anahtar Kelimeler: 21.Yüzyıl Öğrenme ve Yenilikçi Beceriler, İletişim, İş Birliği, Yaratıcılık, Analitik Düşünme, Dijital Beceriler, Yaşam ve Kariyer Becerileri, Mesleki Gelişim.

TABLE OF CONTENTS

COVER i
APPROVAL ii
DEDICATION iii
ETHICS DECLARATION iv
ACKNOWLEDGEMENTS v
ABSTRACT vi
ÖZET vii
TABLE OF CONTENTS viii
ABBREVIATIONS xi
LIST OF TABLES xii
LIST OF FIGURES xiii
LIST OF APPENDICES xiv

CHAPTER I

1. INTRODUCTION

1.1. Background of the Study 2
1.2. Problem Statement 3
1.3. Purpose of the Study 5
1.4. Research Questions 5
1.5. Significance of the Study 5
1.6. Limitations 6
1.7. Key Definitions 6

CHAPTER II

2. LITERATURE REVIEW

2.1. Education in 21st Century 9
2.2. Partnership for 21st Century Skills Framework and Other Major Frameworks 15
2.2.1. Partnership for 21st Century Skills Framework 15
2.2.2. Other Major Frameworks 17

2.3. Communication 18
2.4. Collaboration 19
2.5. Creativity 21
2.6. Critical Thinking 24
2.7. Digital Literacy Skills 27
2.8. Life and Career Skills 27
2.9. Teachers' Professional Development and Teachers' Education in the 21st Century 28
2.10. Summary 30

CHAPTER III

3. METHODOLOGY

3.1. Introduction 31
3.2. Research Design 31
3.3. Research Setting and Participants 34
3.4. Data Collection Procedure of the Study 36
3.4.1. The Questionnaire 36
3.4.2. Interviews 37
3.4.3. The Seminar with KWLA Chart 39
3.4.4. Lesson Plans and Reflection Paper 39
3.5. Data Analysis 40

CHAPTER IV

4. FINDINGS

4.1. Introduction 42
4.2. Interpretation of the Questionnaire Data 42
4.3. Interpretation of the Qualitative Data with Focus Group 48
4.3.1. Open-ended Response Part of the Questionnaire 49
4.3.2. Interpretation of the Interviews 52
4.3.2.1 Teachers' Knowledge and Awareness of the 21st Century Skills . 53
4.3.2.2. Teachers' Implementations and Usage of the 21st Century Skills 55
4.3.3. Interpretation of the KWLA Chart 56

4.3.4. Interpretation of the Teachers' Reflection Papers about Their Lessons ... 58
4.4. Overall Findings ... 59

CHAPTER V

5. DISCUSSION AND CONCLUSION
5.1. Introduction ... 60
5.2. Discussion of Findings with Reference to Research Questions ... 60
5.3. Conclusion ... 63
5.4. Further Implications ... 63
5.5. Suggestions for Future Studies ... 65
6. REFERENCES ... 66
7. APPENDIX ... 76
8. CURRICULUM VITAE ... 88

ABBREVIATIONS

EFL : English as a Foreign Language

ELT : English Language Teaching

P21 : Partnership for 21st Century Learning

OECD : Organisation for Economic Co-operation and Development

SPSS : Statistical Package for Social Sciences

LIST OF TABLES

Table 1. Main Categories and Sub-titles of the Questionnaire..... 37
Table 2. Descriptive Results of the Main Categories of the Questionnaire (Implementations and Awareness of 21st Century Skills)..... 43
Table 3. The Participation Level in the Option 5 (Always True for Me)..... 46
Table 4. The Level of Emphasis on 21st Century Skills (%)..... 48
Table 5. Responses to the KWLA Chart..... 57

LIST OF FIGURES

Figure 1. 21st Century Learning Framework (2009). 16
Figure 2. Definition of Creativity (P21, 2011). 24
Figure 3. Procedure of the Study 40

LIST OF APPENDICES

Appendix 1. Ethics Committee Approval Document 76
Appendix 2. Survey Questionnaire of the Implementation of 4Cs 79
Appendix 3. Interview Questions..... 83
Appendix 4. Consent Form 84
Appendix 5. Kwla Chart 85
Appendix 6. Administrative Consent Form 86

CHAPTER I

1. INTRODUCTION

Undoubtedly, we are experiencing a new era which is much more different than the previous centuries, in terms of education, social sciences, academic and work-life. In this era, which is also known as the 21st century, teaching core subjects by using traditional teaching methods are not sufficient to bring learners up as effective citizens, workers and leaders. As enlightened eclectic teachers of the 21st century, providing affordances to the learners and integrating 21st century learning and innovation skills to our teaching context are essential requirements for this new era. Therefore, as Taylor (2009) stated, teaching and learning settings need to move away from traditional methods which are mostly focused on the mastery of the core subjects and they must be combined with the new era's skills such as communication, collaboration, creativity, and critical thinking (4Cs), digital literacy skills and life and career skills.

For this purpose, educators, teacher trainers and researchers have attended and established several seminars, training programs and professional development activities to understand these skills better. In the 21st century, a successful professional development program helps teachers discover these skills by encountering, engaging and exploiting them with some activities such as learning from each other, problem-solving with colleagues, using technological devices effectively to build knowledge, peer and self-observations among colleagues and being involved in action and reflection (Garcia, 2012).

Furthermore, a variety of frameworks have formed to implement 21st century learning and innovation skills globally. Teaching and learning frameworks for 21st century skills provide a guideline for teachers and learners including scaffolded and diverse approaches that help constructing knowledge about core subjects while informing when and how to apply these skills (Ambrose, et al., 2010). Current conceptual frameworks for 21st century skills include the Partnership for 21st Century Skills (P21), EnGauge Framework, The Assessment and Teaching of 21st Century Skills Framework (ATC21S) and KSAVE framework, OECD conceptions and Cambridge Life Competencies framework.

In the light of this general background, the current research study is going to focus on the exploring EFL teachers' perceptions on the 21st century skills which are

known as communication, collaboration, creativity and critical thinking, digital literacy skills and life and career skills and teachers' awareness and the usage of these skills in their teaching context.

1.1. Background of the Study

We are in the period of the 21st century which includes a skillset that consists of 4Cs, digital literacy skills and life and career skills for the learners to become global citizens and effective leaders and workers. The education and teaching context have been changing rapidly, the ideas behind the importance of 21st century learning and innovation skills have been spreading and developing among teachers, educators and researchers. Rotherham and Willingham (2010) define the situation as "not new but a worthy challenge" by claiming that many business leaders, politicians, and educators are aware of the importance of 21st century skills which lead to revolutionary improvements around the world and students need these skills to become successful today.

The awareness and knowledge of these skills are essential not only for students but also for the teachers, educators, leaders and administrators. Therefore, especially educators and teachers must be aware of these skills and follow them closely to use them in their teaching context effectively (Ilhan,2004). Professional development should be provided by seminars, conferences, peer-self-observation and with other ways to the teachers and prospective teachers to improve pedagogical implementations of the 21st century skills in the classroom context. We must construct a well-organized education and teaching context including core subjects integrated with these skills for learners and additionally, continuous professional development is required for teachers to be able to implement these skills pedagogically and be aware of how to use, when to conduct and in which ways to present them.

Mastery of core subjects (mathematics, history, science and language arts) integrated with 21st century learning and innovation skills is seen as a requirement for the development of academic knowledge and effective communication. Especially for the English language, these skills are essential for learners since it has facilitated communication among people all around the world as a mutual language with the effect of globalization (Wang, 2016). Therefore, to be a part of the global community and involved in a competition, teaching and improving the target language should be one of

the main purposes of educators, and students need to think analytically. They are supposed to be creative, communicative, and innovative in order to obviate the problems when they encounter difficulties in real-life and their careers (Zivkovic, 2016).

The purpose of 21st century education for students is to engage, encounter and exploit the language and using the language to learn instead of learning to language to use. For this purpose, the pedagogical implementations of the 21st century learning and innovation skills have been observed among English language teachers in this current research, in addition to this, teachers' perceptions, beliefs, values, awareness and ideas about these skills have been investigated through the study.

1.2. Problem Statement

The education system and teaching methods have been changing rapidly, as a result of these changes, both teachers and students are supposed to keep up with the new era which is known as the 21st century. However, teachers, educators and learners still have a lack of information about the term '21st century' and the skills of this era which are communication, collaboration, creativity, critical thinking, digital literacy skills and life and career skills. Many researchers have stated that teachers' knowledge and awareness of these skills and their classroom implementations by integrating these skills still require development in every field of education (King, 2012; McKenna, 2015; Nazikan & Park, 2016).

"Changes in the standards and purposes in education have prompted curriculum frameworks and instructional methods to change. Whilst, in the area of human capital, schools cannot escape the trend to respond to these local or global market needs." (Abril, n.d.) Hence, classroom learning and teaching experiences must be provided with an exposure to the 21st century skills by integrating and implementing them to the classroom context in a meaningful way in order to prepare learners for their future life as global citizens. However, schools are not sufficient enough to train their teachers for the new generation and the new era in terms of conducting teacher training programs and professional development processes such as seminars, conferences, and career mobility (Saavedra, 2012).

According to a study about the implementation and the awareness of 21st century skills which has been conducted by the OECD, Turkey is one of the countries among

the members that gave importance to the 21st century learning and innovation skills in the national curricula, however there is lack of professional development or training for teachers to be aware of these skills and to use them properly in their classroom context. Additionally, the OECD reported that, the implementation and awareness of 21st century learning and innovation skills in the process of teaching English in Turkey needs development in comparison with other member countries (OECD, 2009a).

The Programme for International Student Assessment (PISA) study, developed by the OECD, has been playing an important role for decades among cultures to obtain information about their educational levels and inquire about other nations' educational levels. In Turkey, PISA exams are conducted continuously and unfortunately Turkey's results are quite low among other members from the world, and these poor PISA results are seen as a negative impact on Turkey's educational system and public opinion in general since the exam is the assessment of core subjects combined with 21st century's learning and innovation skills. Consequently, in Turkey's situation, teachers, educators, administrators and researchers must be aware of the importance of these skills and the knowledge and usage of these skills must be developed to acquire better results in PISA exams.

Especially for teaching English, Turkey is one of the countries which start English language education at primary and even at kindergarten levels, but there is still lack of knowledge and ability to use the English language in the country as a result of not properly providing the skills for an effective language acquisition. Doğanay and Unal (2006) stated that, teachers are supposed to promote 21st century learning and innovation skills in their classes and develop professionally for the ability to use these skills appropriately.

It is obvious that teachers' commitments are the starting point of any change at the classroom and education level, without the support or effort of the teachers, any improvement will be challenging (Vandenberghe, 1984). It is essential to take into consideration that teachers must be supported professionally, trained and must be a part of the change by regulating themselves in terms of getting accustomed to use these skills and implement them pedagogically. Therefore, the main aim of the study is to investigate teachers' perceptions on 21st century learning and innovation skills of English language teachers and improve their awareness and usage of these skills, as it is important to investigate whether teachers are familiar with them and their usage.

1.3. Purpose of the Study

To keep up to date and become enlightened eclectic teachers in our field, developing our awareness and practices of 21st century skills is as important as developing ourselves professionally. The goal of 21st century skills is not only educating learners, but also forming effective citizens, workers and leaders. The education context, like an ocean, consists of affordances, waiting for us to discover, engage, encounter and exploit. In the light of this general background, the purpose of this study is to explore EFL teachers' perceptions on the 21st century skills by conducting an exploratory case study in a private college in Adana, Turkey.

1.4. Research Questions

For the purpose of the research, the following questions sight answer:

1- What are the perceptions of EFL teachers on 21st century learning and innovation skills?

2- How do professional development activities contribute to EFL teachers' understanding of 21st century skills?

1.5. Significance of the Study

Over the past decades, incorporating 21st century learning and innovation skills to the teaching context has gained a great deal of interest which is a result of the challenges that learners encounter in the changing world and their academic lives (Gilroy, 2015). Hence, teachers and learners are supposed to be aware of these skills and they must be able to integrate them to their learning and teaching processes. For this reason, especially teachers of the 21st century, must take the responsibility for the change and regulate their methods, approaches and techniques considering the competences of these skills and being aware of their learners' levels. With the help of this study, teachers will be able to enrich their knowledge about these skills and develop their awareness and implementations of them in their classroom context, additionally the results of this study will shed light on teachers, educators and experts way as a guide to establish principles for further research or implications.

Orak (2019) stated that, knowledge is transformed by teachers and it flows from teachers to students. Therefore, this research study is conducted with teachers' to investigate their perspectives about 21st century learning and innovation skills, their

awareness and usage of them and the level of pedagogical implementation of these skills since there are quite few studies in the literature about teachers' point of view on this topic. That is the reason why researchers have chosen this topic to be studied and researched, additionally with the help of this research, a different perspective with different points of views will contribute to the literature of teaching English as a foreign or second language field. The education system has been changing and it needs a response with the help of raising awareness of these skills and providing knowledge about when and how to integrate these skills to the teaching and learning context. It is our priority to show our students to learn by using the 21st century skills and promoting the ideas, opportunities and the advantages which are included in these skills.

1.6. Limitations

"The limitations of the study are those characteristics of design or methodology that impacted or influenced the interpretation of the findings from your research" (Price & Murnan, 2004). The main limitation of the study is the corona virus which have had a negative effect on formal education to continue teaching at schools. Therefore, due to the corona virus problem, the education has been moved to online platforms and recently online education has been employed. However, the participants are the teachers who work in a private college in Adana, Turkey and they were supposed to be observed by the researcher as a part of the research. The corona virus problem has been a limitation for the observation stage, as a conclusion of this situation, the researcher asked participants to prepare a lesson plan including 4Cs and the 21st century skills. With the help of a reflection paper of these lesson plans, the researcher investigated the process of conducting these skills into the lessons of participating teachers in their teaching contexts in terms of challenges, advantages, strengths and weaknesses, learners' reactions and teachers' feelings.

1.7. Key Definitions

21st century skills: The term 21st century skills refer to core competencies including communication, collaboration, creativity, critical thinking, digital literacy skills and life and career skills which supports the idea that schools, administrators and teachers are supposed to integrate these skills into their

teaching context and curricula to help students thrive and succeed in work and life (Rich, 2010).

4Cs: The four main skills of the 21st century learning and innovation skills, which are also known as communication, collaboration, creativity, and critical thinking. In order to prepare students for the 21st century with its demands, it is undeniable that developing 4Cs among EFL learners and teachers has an essential role (Saleh, 2019).

Communication: The skill that plays a vital role among 21st century learning and innovation skills in terms of transferring the messages in education and the teaching context. Being the most important social tool for all the societies in the world, without communication it would be difficult to acquire goals or reach the targets. Wehaba and Kedar (2007) stated that using communication as a skill in a teaching context help learners make links between their real and academic lives, additionally they apply what they learn during the process and reflect them to the world.

Collaboration: Working together to solve a problem, creating and completing a task has become one of the demanded skills in this era which is called 21st century**.** Therefore the idea of collaborative teaching, learning, thinking and working is supposed to be promoted in the learning and teaching context. Within the term 21st century, collaboration skills have been a trend in which learners are supposed to think and work collaboratively on critical subjects to reach their goal (Austin, 2000).

Creativity: Among 21st century skills, creativity as a skill is necessary to be innovative, novel, and inspirational for both teachers and learners to be effective individuals in a global world. For human thought and survival creativity is a fundamental skill and with the help of the presence of creativity, instruction and knowledge are supported in the teaching context (Kaplan, 2019).

Critical Thinking: This skill can be defined as a form of reasoning by thinking analytically, articulating ideas, eliciting meanings from the context, considering divergent arguments and being able to make comparisons with them, formulating hypotheses, being able to make decisions effectively and solving problems (Facione, 2010). Therefore, critical thinking is a skill that should be integrated during the teaching and learning processes in the 21st century.

Digital Literacy Skills: The term “digital literacy skills” has gained importance with the theme of 21st century learning and innovation skills and this term can be defined as a combination of 4Cs with technology such as using technological tools effectively, being able to teach online or preparing a presentation by using different channels of the technology. Promethean (2017) claimed that in order to become global digital citizens, it is a necessity for individuals to keep up with the changes in technology and be responsible for the usage of it to interact with the world effectively.

Life and Career Skills: Today’s global world and education system is very different from the one that we had one or two decades ago. For this reason, teaching academic core subjects is not sufficient to prepare our students for real life and their professions. They need to be trained in order to navigate the complexity of real life and their careers when they graduate, therefore life and career skills must be integrated to the teaching and learning context.

Frameworks: Changes in the world and globalization and technological improvements have been driving forces for our era in every field of life, especially in the education context teachers and learners should be able to follow these changes and regulate their processes accordingly. For this reason, organized plans and sets of standards are needed to be followed as a guide to clarify when and how to use the 21st century skills.

CHAPTER II

2. LITERATURE REVIEW

2.1. Education in 21st Century

English language is used by speakers all over the world and it has become the preferred language for a number of factors such as prestige, employment, profit**,** academic career, and so on. Crystal (1997) said that without a common language between people from different nationalities, a conversation would be impossible in the world. Our world needs communication in every field such as education, commerce, politics, culture and economy. People learn and acquire languages to communicate and keep up to date with global changes. As humans collaborate, communicate and compete globally, many developments occur in every field to empower 21st century requirements.

There is a continuous change in the world and it is obvious that keeping pace with the change without global communication is impossible. There is a term called globalization and it focuses on not only economics, politics and social life, but also covers education itself. As Miller (2016) stated in the study, applying the system of globalization to education is the most outstanding way to contribute the level of communication and classrooms are the best places to see the difference between the old and the new era. Like Miller, García-Herreros (2017) indicates that the globalized world in the 21st century requires many opportunities for students to be able to communicate in the second language both fluently and accurately which is the most important thing among these needs, since it is accepted as an obligation for future citizens.

In other words, since it has a status as a second language in almost every country, the English language is regarded as a vital language for both the professional and personal fields of life (Nishanthi, 2018). Additionally, Canagarajah (2007) claimed that English is seen as a highly spoken language in multilingual areas and, accepted as a lingua franca by the speakers who do not speak English as L1. Briefly, English has been seen as a bridge of communication for people in different circumstances, who have different first languages (Gallego, 2012). Consequently, being proficient in English is generally seen as a desirable goal for all the everyone in the world for many reasons.

Students have been developing skills and learning the language in different ways to become fluent and accurate in English. They are processing the language because the

English language will be essential to them in the future in relation to work and education as well as in social activities. These skills, competencies, even values have led to huge changes in the field of education. It is observable that these skills and competencies are crucial in the 21st century.

Skills directly indicate the proficiency, facility and quality and this means an acquisition through practice and training (Dweck, 2000). According to the 'Glossary of Education Reform' (2016), 21st century skills are defined as a broad set of knowledge, work habits, skills and characteristic features which are accepted as critically important to bring success in our era by educators, teachers and researchers, and this success can be observed both in career and personal lives. According to Wagner (2008) students should carry the 21st century skills, including critical thinking and problem solving, collaboration, leadership, mental agility and adaptation skills, using initiative, using effective communication skills both orally and written, having information processing skills, creativity and imagination skills. In education, these skills, such as critical thinking, creativity, learning together, analytical thinking, patience and mental strength are crucial for future economic and educational growth (World Bank, 2011). Therefore, students are required to succeed in the 21st century, they need to get the education of 21st century skills, and they need to adjust themselves, regulate and meet the requirements of the 21st century with the help of their teachers who are their scaffolders.

Fandiño (2013), emphasizes that practices and processes of applying 4Cs (communication, collaboration, creativity, critical thinking) and self-directional and cross-cultural skills should be provided to the students in EFL (English as a Foreign Language) classrooms. As enlightened eclectic teachers of the 21st century, our objective is not only to develop our students' competencies and skills, but also to improve ourselves professionally. Teachers are the starting point of any changes, decision-makers, appliers in education, hence teachers' awareness and professional development in their fields always have a big impact on students, the teaching context and the environment (Rusdin, 2018). A teacher of 21st century skills takes you from where you are, extends, modifies, adapts, stretches students' minds and the teaching context, "ever onward, to the next step, the next insight, the next glimpse of knowledge" (Rayford,2010). Therefore, teaching should be recognised as a complex and challenging activity which requires many competencies and commitment, there is a need for a stronger focus on skills, values, teacher knowledge, and developing thinking across the world.

In an English as a foreign language (EFL) context, there are many different variations to contribute to the learning process, as Gass and Selinker (2001) referred to three primary sources which are the teacher, materials and other learners. Being aware of these sources is a necessity for language teachers, who are supposed to provide all the affordances about language to the learners in the teaching context. When the teacher is aware of his/her role to convey the importance of the 21st century skills to the students and when the teacher manages to integrate these skills in the learning process, it is predictable that the quality of education will reach higher levels both locally and globally. Teachers and educators need to provide academic content to teach the 21st century skills every day, at every grade level, and in every class not only in but also out of the lessons (Sang, Liang, Chai, Dong & Tsai, 2018).

In this learning process, a teacher is an individual in the classroom who has the proficiency, tools and information which are necessary to edify students' knowledge and competencies (Archana & Usha Rani, 2017). However, teachers are also practitioners, facilitators of this new system in terms of the usage and the implementations of the 21st century skills in the classrooms, as a consequence they need to be supported by the educational policymakers, administrators, teacher trainers, and researchers with a guidance of materials and samples to empower the usage of the 21st century skills and improve the integration of them to the teaching context.

Many countries and educators have developed various educational reforms to foster the quality and the equity of education according to the 21st century skills (Sang, Liang, Chai, Dong & Tsai, 2018). The quality of education and teaching has been changing continuously, as Heraclitus stated "Everything changes and nothing remains still and you cannot step twice into the same stream.", that is why what was considered as good education decades ago, is no longer enough to teach and learn to bring success in each part of the life such as career, education and so on.

Recently, there are many worldwide organizations focusing on education with these skills, such as UNESCO, OECD, WTO, World Bank (Gur, Bekir & Celik, Zafer & Ozoglu, Murat, 2012). These organizations are essential for learners and countries to shape national policies in the fields of education, culture, and economics. Especially for educational policies, the OECD is considered as the most influential and international actor today (Rautalin and Alasuutari, 2009).

The Programme for International Student Assessment (PISA) study, developed by OECD, is one of the key indicators for cultures to identify their educational levels

and to obtain information about other national's educational levels. In our era, the PISA exam has been claimed to be a project that helps to develop and analyse comparative international educational data for countries (Grek, 2009). In our country, PISA exams are implemented gradually and unfortunately Turkey's scores are quite low, and these poor PISA results have had a negative impact on Turkey's educational system and public opinion in general. Educators, policy-makers, researchers and journalists emphasize Turkey's low PISA scores in comparison with other countries.

In general, PISA exam assesses students' knowledge and skills which are acquired to participate in society and investigates not only what they have learned but also how well they use and integrate this knowledge and skills into their daily life, such as in their career, communication and social life (OECD, 2007). In the exam, students used to be responsible for questions which are about reading-writing, maths and science however in the recent exams there are other sections for students to answer the questions which are about critical thinking, problem-solving and collaboration, which refers directly to the 21st century skills. PISA exam scores are evidence of usage of the 21st century skills and it indicates the awareness and the implementations of 21st century skills by teachers in each country. In Turkey's case, teachers, educators and researchers of 21st century are supposed to regulate and adjust their teaching context according to this change and develop the 21st century skills as this new century requires new ways of thinking, teaching and learning (Gardner, 2008; Pink, 2005).

Today's education context, settings and classrooms are very different from the ones 15 or even 10 years ago. Teachers are supposed to have the ability to respond to students' various learning styles and differences, students' individual characteristics must be taken into consideration as it is time to accept the reality of "One size does not fit all." (Borthwick-Duffy, Palmer & Lane, 1996) and additionally teachers need to adjust their teaching abilities and practices according to this new era.

In the light of these general ideas and studies, it is clear that professional development for educators must be switched into a continuing professional development including 21st century skills necessities, requirements and qualifications. As Gibson and Brooks (2013) stated in their study, a continuing professional development includes ongoing and intensive experiences, provides affordances and opportunities that aims for success for both learners and teachers, ever changing and flexible contents and curriculum. Additionally, they also claimed that professional development is a process that focused on teachers' needs and interests, it increases the awareness of meaningful

and active learning, gives importance to the 21st century necessities and requirements such as collaboration, communication, critical thinking, creativity, and with the help of professional development stages, teachers raise their perspectives to the new methods, ideas, techniques and shape their teaching by feedback regarding the issue of 21st century skills. That is the reason why teachers and educators enhance the quality of all stages of their career which refers to a key factor in improving the quality of education that learners receive.

With the help of this study, not only learners but also educators can have a chance to widen their perspectives towards the 21st century skills and their professional development. A widely cited definition of the importance of continuing professional development for teachers and their environment is claimed by Day:

> "…all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute through these to the quality of education in the classroom. It is the process by which, alone and with others, teachers… acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice." (Day, 1999, p.230).

Now we are in the 21st century which indicates life-long learning, communication skills, creativity, collaboration with others and critical thinking in education. As teachers and researchers, our initial goal is not only to be aware of these terms and their sub-categories but also use them in a correct way in our teaching context and practices. In these opportunities and a wide range of advantages, as teachers and researchers, we must be aware of these skills, develop and adapt them to our teaching practices and implementation. To keep up to date and become enlightened eclectic teachers in our field, developing our practices of 21st century skills is as important as developing ourselves professionally.

The goal of 21st century skills is not only educating learners, but also forming effective citizens, workers and leaders. The education context consists of full of affordances waiting for us to discover, engage, encounter and exploit. The main objective of this study is to explore EFL teachers' perceptions on 21st century skills and teachers' pedagogical implementations of these skills and their professional skills, additionally to open a path for their practice and usage of 21st century skills.

Despite the variety of studies and research about 21st century skills and their necessities, there is still misuse or lack of use of them in classroom implementation. Our objective must be beyond teaching a language, it is important to understand these skills which shed a light on us in our teaching context, about what to teach, how to teach, and most importantly, how to train and prepare teachers to do this (Fahnoe, Kereluik, Mishra, & Terry, 2013).

The 21st century skills include many components and each of them serves a purpose for our students, they all have crucial roles in continuous professional and individual development. Apart from communication, creativity, critical thinking, and collaboration (4Cs), they also increase global awareness, acculturation, financial, environmental and business literacy and improve social, civic and health literacy. With the help of 21st century skills, we as teachers, and our students are both on the same boat, we are together, and the practitioners are on both sides of the context. We learn as we teach and witness the development. Additionally, these skills are one of the key factors of developing leadership and innovation, using the media and technology within an effective way, increasing ICT skills and developing life and career skills such as being flexible and adaptable, self-directed and initiative peers throughout the life. Students as 21st century's language learners understand diverse cultural perspectives and use appropriate sociolinguistic skills in order to function in diverse cultural and linguistic contexts (Magner, Saltrick, & Wesolowski, 2011). For instance, recently in Finland, creativity has been taken as an important factor in teaching context and teaching and learning frameworks consist of creativity for the future of the country. Additionally, the 4Cs (communication, collaboration, creativity and critical thinking) have been placed in the national curricula of China to keep up to date with the world and to stimulate 21st century learning and skills (Orak,2019).

Researchers and teachers have been investigating the competencies and necessities to meet the requirements of the 21st century. According to many researchers and scholars, teaching 4Cs is important for new generations and qualified citizens. Teachers and teacher-educators have started to focus on seminars, workshops, conferences and webinars to improve themselves both personally and professionally. As a conclusion of these huge changes, our era has been started to be called the 21st century, which promotes traditional subjects skills, learning and innovation skills, career and life skills, as well as digital literacy skills.

There are many frameworks indicating the organized plans and set of standards and learning outcomes that define the 21st century skills and their learning/teaching, about what students and educators should know and be able to do. Current conceptual frameworks for 21st Century Skills include the Partnership for 21st Century Skills (P21), originated in 2006, EnGauge Framework developed by the Metiri Group and The North Central Regional Educational Laboratory (NCREL) in 2003, The Assessment and Teaching of 21st Century Skills Framework (ATC21S) and KSAVE framework in 2010, OECD conceptions formed by the Organization for Economic Cooperation and Development (OECD) in 2005 and Cambridge Life Competencies framework developed by Cambridge University Press in 2018.

As Bishop (2009a) claimed in his study which is called "Partnership for 21st Century Skills (P21) Framework", 21st century skills are crucial for language learners both in their academic and personal life. These frameworks are the keys for educators and teachers to provide the answers for a set of questions, such as what to conduct, how to conduct and when to conduct.

2.2. Partnership for 21st Century Skills Framework and Other Major Frameworks

2.2.1. Partnership for 21st Century Skills Framework

Partnership for 21st Century Skills (P21) focuses on a variety of skills such as collaboration, communication, creativity, critical thinking, problem-solving skills, interpersonal skills, self-directional skills, and information technology skills (ICT) to use the tools of the 21st century and improve (P21, 2009). The Partnership for 21st Century Skills was founded in 2002 (www.p21.org), aiming to facilitate the importance of 21st century skills and to make students be better innovators and problem solvers by reaching not only the learners but also the educators (Yeni, 2018). P21 has members all around the world and it provides a life-long companionship in terms of educational and career needs, ensuring the informative and qualified citizens who are interconnected to the global life.

P21 Framework investigates skills and knowledge which are needed by the students for their future career life and academic success, supports the systems for citizenship. According to the framework defined by P21 in 2007, English, Reading, Language Arts, World Languages, Arts, Mathematics, Economics, Science, Geography, History and Government and Civics are the core subjects, on the other hand, Global

Awareness, Financial, Economic, Business, Entrepreneurial Literacy, Civic Literacy, Health Literacy and Environmental Literacy are defined as interdisciplinary themes (see Figure 1.) These core subjects and interdisciplinary themes emphasize three basics of the 21st century, life and career skills, learning and innovation skills and information, media, and technology skills. The core subjects must be integrated into the interdisciplinary themes to bring success for the learners of the 21st century (P21, 2009b).

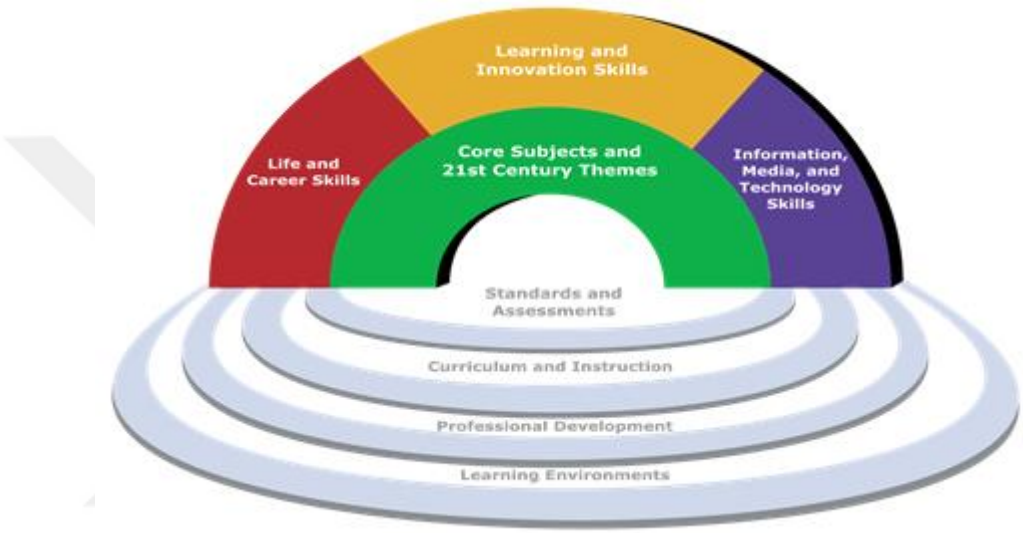


Figure 1. 21st Century Learning Framework (2009).

Core subjects and 21st century themes are the initial part of the figure 1 since these terms and the understanding, usage and knowledge of these terms are the main requirements to understand and develop 21st century skills. Core knowledge includes the 4Cs which are creativity, communication, collaboration and critical thinking and they are essential for students to be successful in today's world (P21, 2009b).

During the process of acquisition of these skills and the practicing stages, some external factors play important roles as can be seen in figure 1., for instance learning environments, administrators, curriculum and instructors which can be known as teachers and peers, standards and assessments such as exams, evaluation papers and feedback and also professional development materials such as seminars, conferences and webinars. This graphic represents and describes each element distinctly from each other but the Partnership for 21st Century Skills accepts them as interconnected,

interrelated and affective components in the process of teaching and learning in the 21st century.

2.2.2. Other Major Frameworks

Cisco, Intel and Microsoft created a project launched at the Learning and Technology World Forum in 2009, in London and so 'The Assessment and Teaching of 21st Century Skills Framework' (ATC21S) was originated. The ATC21S framework proposes an integration for two different approaches to conduct 21st century learning skills: "working backward from goals" and "the emergence of new competencies" (Scardamalia, Bransford, Kozma & Quellmalz, 2010). In the study of "Draft White Paper 1: Defining 21st Century Skills", ATC21S and researchers suggest the framework of KSAVE, which is based on knowledge, skills and attitudes, values and ethics aspects of each skill (Binkley, Erstad, Herman, Raizen, Ripley & Rumble, 2010).

In 2003, EnGauge Framework was developed by Metiri Group and NCREL (The North Central Regional Educational Laboratory). EnGauge framework is a web-based framework giving information about six conditions and factors which are critical to the student learning in 21st century by using the technology and provides an online survey as an instrument for schools and educators to conduct online assessments, furthermore it emphasizes the importance of the 21st century learning/teaching skills as an online platform and framework (Lemke, 2002).

In 2005, the OECD (Organization for Economic Cooperation and Development) provided its own conception of 21st century skills, highlighting the usage of language, symbols and texts, as well as managing and resolving the conflicts. Dede (2009) states that "this framework focuses less than P21 on overlaps with the 20th century curriculum and, like the Metiri/NCREL skillset, more on new contextual skills".

Cambridge University Press developed a framework which is called 'Cambridge Life Competencies Framework' in 2018, to help teachers and educators to understand these skills and their importance and be a guide to open a path using these skills in a teaching context. According to the framework, there are seven competencies in the learning journey: collaboration, communication, critical thinking, creativity (4Cs), emotional development, learning to learn and social responsibilities (Cambridge University Press, 2019). Briefly, all general frameworks are consistent with each other

and they have many common points, goals and purposes. It is observable that the main focus of these frameworks is the 4Cs.

2.3. Communication

Communication is a tool to communicate, and generally defined as the imparting or exchanging of information by speaking, writing or using some other medium. It also means to transmit messages, helps to send and receive information, to exchange ideas, thoughts, feelings and so on. Oliver (1997) states that communication refers to exchanging emotions, feelings, and ideas between two or more people by using words, letters, and symbols (Oliver, 1997, cited in Tekin, 2016). In communication, there are various ways to convey messages, both verbal and non-verbal, in writing or symbols, by using body language and mimicry, the main objective is to transfer the message to the receiver. Like this explanation, P21 (2017) states that, to be able to reach the expected results and consequences, it is possible to mention about communication in the settings if there is an exchange of information.

The Pew Research Center in 2014 conducted research to investigate and find out the most important skill among ten skills and a survey was provided to the participants to select the most important one for themselves and their children for their future career and academic life, the results of the survey were significant because 90% of the people selected communication (Goo,2015). Communication, a part of the 4Cs, is quite a fundamental skill among the 21st century learning and innovation skills for learners**,** both in education and career lives. The importance of communication is defined by OECD (2009a, p.10) with these words:

“communication plays an important role in the preparation of students to be not only lifelong learners, but also members of a larger community with a voice and a sense of responsibility to others.” Communication was born in pre-historic times by humans to be accepted and become a part of a community, society and live together, since that time life-cycle spins around communication (Gönenç, 2007).

It is inevitable to use communication in the teaching context and the environment, for English language teachers it is crucial to be aware of effective communication skills and use them in a proper way which is a good starting point to adjust and implement 21st century skills during the teaching and learning process. Dilley, Fishlock and Plucker (n.d.) claim that learners are supposed to be prepared by

their teachers and educators for the complexity of the 21st century and career life by using the skills and "communication is a vital piece of this preparedness, as the ability to easily and effectively transfer your ideas to others is an important piece of living and working in a society".

Communication can be defined in many ways, but in 2011(a), P21 (Partnership for 21st Century Skills) defines communication skills clearly as follows:

- Articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts
- Listen effectively to decipher meaning, including knowledge, values, attitudes and intentions
- Use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade)
- Utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact
- Communicate effectively in diverse environments.

Teachers are supposed to teach effective communication skills to the learners and teaching communication skills strategies need to be developed by the teachers during the process of learning and teaching. Wagner (2010) suggests and supports the importance of teaching communication skills to learners in their early years of education using both oral and written ways of communication. Furthermore, communication skills are the core of teaching the language and they are the most important components for language teachers' as they teach and help students to become both respectful and skilled language communicators (McMahon & Crump, 2011).

2.4. Collaboration

Collaboration is accepted as another key skill of 21st century learning and it is among the 4Cs, which is generally explained as working with others effectively and efficiently to bring success not only for students' academic achievements but also for teachers' professional and individual developments. Bedir (2019a) claimed that "Collaboration is a commitment to work skilfully with others in groups." which

indicates the importance of group work and HOW diverse teams may help to come up with different ideas and attitudes to achieve the common goal.

Collaboration is a philosophy of communication, interaction and an individual's lifestyle in which group members are responsible for their actions, respect their ideas and abilities, increase the effectiveness of learning and contribute to the process to reach the target. Marjan, Morghan and Zhina (2012) support the idea of collaboration in their study by highlighting "a sharing of authority and acceptance of responsibility among group members for the groups' actions".

As one of the 21st century trends, collaboration is a need for society to think and solve the problems by working together, furthermore with the help of collaboration, many other advantages arise such as:

- Students are able to understand the differences and learn from each other with the help of interaction (Johnson & Johnson, 1985)
- Collaboratively learning social interaction skills (Cohen & Cohen, 1991)
- Higher-level thinking skills are developed with the help of collaboration (Webb, 1982)
- Collaboration helps students to become actively involved in the learning process (Slavin, 1980)
- Students' self-management skills improve with collaboration (Resnick, 1987).

Recently, collaboration has been used as a channel to transmit and exchange ideas and produce products with people who are kilometers away from us thanks to technology and organizational support, which also motivates people to work collaboratively in different fields – from employees to students. Collaboration is seen as a new skill but Silva (2009) disagrees and states that it already exists**,** although it has gained new importance and started to be better known among the 21st century skills in education with others. Silva also highlights the importance of collaboration by claiming that in today's education students' employing knowledge is more important than the knowledge itself. It can be deduced from the definitions and the ideas about collaboration that in the educational context participants interact, share ideas, exchange and transmit knowledge and work together for a common goal. In 2014, Onside Learning published an educational video which describes collaboration in a more detailed context, collaboration is the ability to share ideas and thoughts openly alongside

another person and to come up with a combined answer, response and/or solution about a particular topic or issue. It is the ability to combine different notions, beliefs and theories into one concrete explanation and a solution that is reflective of the diversity of the group itself.

With the help of collaborative tasks, students have the opportunity and the chance to see the different perspectives on the same topic, they learn from each other and they investigate and facilitate different ideas about the same topic, which can be considered as a social platform to improve learning and communication skills (Miller, 2016). In 2019, Gorman claimed the reasons for the importance of collaboration with a list which consists of ten reasons for student collaboration in the classroom as follows:

- Allows for important meta-cognition that has the power to promote understanding
- Provides an avenue for the teacher to listen and assess learning
- Opens a window to visible thinking for both students and teachers
- Allows students to unlock learning using multiple interpretations and explanations
- Provides access to vital success skills, important in future careers
- Allows for the development of active listening and thoughtful interaction
- Promotes empathy and understanding while supporting work in diverse groups
- Teaches self-regulation and proper social interaction
- Facilitates the art of persuasion and promotes positive and productive discourse
- Guides and builds powerful skills that promotes inquiry and problem-solving.

Many scholars and researchers have emphasized the importance of collaboration in today's global world. It is observable that, success, significant work, and targets are more achievable in teams, and in many cases, in global teams. As a result of this general background, collaboration is one of the key ingredients for students to be successful and generate more knowledge in today's global society.

2.5. Creativity

Among 4Cs, creativity is the ability to think outside of the box and it is directly integrated with the word "innovation". Creativity is also one of the significant

components and skills of 21st century learning and teaching. Creativity has been a topic of discussions and research for many years, scholars and researchers seek an answer to many questions about creativity, such as how to be creative, how to improve the creativity, how to measure it, whether it is an ability or an aptitude and whether it is an innate or acquired skill (Piirto, 2011). All these and more are questions asked by scholars, researchers, psychologists and the term creativity has gained its importance once more with the generation of the 21st century skills.

In global communication and today's world, creativity is an important skill both in the career and academic lives of individuals, as Sir Kenneth Robinson (2011) stated, the importance of creativity that cannot be separated from other subjects which are taught at schools such as literacy, maths and science and it should be taught in the same way – integrated with the main courses for the students. Robert Jeffrey Sternberg (2007), an American psychologist known for his theories on love, intelligence, and creativity, once stated that successful individuals are those who have creative skills, to produce a vision for how they intend to make the world a better place for everyone; analytical intellectual skills, to assess their vision and those of others; practical intellectual skills, to carry out their vision and persuade people of its value; and wisdom, to ensure that their vision is not a selfish one.

Creativity is always seen as a cognitive concept in education and it is often linked with creative thinking, being innovative and having imagination. It is obvious that creativity has a significant role in education for both learners and teachers, with the presence of this skill, learning becomes much easier and learners acquire the target topic or the subject by using both hemispheres of the brain. This was pointed out by Dornyei in 2007(a), he reported that there is some evidence that creativity is a positive correlate of academic performance.

Teachers' awareness and implementations of creativity to the EFL (English as a foreign language) and ESL (English as a second language) classrooms are very crucial in today's global world, therefore teachers' training and professional development about this skill is a necessity in our era to increase their awareness and usage and contribute to their knowledge. It is also significant to understand the underlying parameters of the creativity and its concept to conduct effective strategies in the field of education by the integration of creativity.

According to the study developed by Fitriah in 2017, Indonesian EFL teachers usage and awareness of creativity and their point of view towards this skill indicate that

teachers have a positive attitude to creativity and they believe that the integration of creativity to the classroom not only engages students in classroom activities but also helps to prepare a condition that allows students to create their own creativity and empower their imagination to flourish. Reflecting on the findings of this study, it is recommended that teachers and educators should widen their horizons for their students and their teaching context to make classes and education much more original and creative.

When the right affordances and opportunities are given, every learner is capable of being creative, using their imagination and extending their point of view, especially in a language learning context as language emerges and enables us to create new associations, meanings and combinations. Additionally, these options can be explored, engaged and emerged by students even at the elementary level and learning becomes more meaningful and compelling with the help of creative skills (Maley & Bolitho, 2015).

Teachers should scaffold students, lead them to create and be innovative, with the help of support which is provided by teachers, students are able to think creatively, they manage to work creatively with others and they implement innovations to their learning journey. Teachers should be a guide for their learners by emphasizing the importance of using creativity in activities such as brainstorming, mind mapping, role-playing, learning stations, opinion-gap activities, and furthermore teachers' professional development and training are needed to improve these integrated skills and develop both professionally and individually in 21st century classes. Many researchers and scholars have emphasized the importance of creativity for years, it can be defined in many ways and the advantages and significance of creativity cannot be negligible. P21 (2011) defines creativity as follows:

Think Creatively	Work Creatively with Others	Implement Innovation
Use a wide range of idea creation techniques (such as brainstorming)	Develop, implement, and communicate new ideas to others effectively	Act on creative ideas to make a tangible and useful contribution to the field in which the innovation will occur
Create new and worthwhile ideas (both incremental and radical concepts)	Be open and responsive to new, diverse perspectives; incorporate group input and feedback into the work	
Elaborate, refine, analyze, and evaluate original ideas to improve and maximize creative efforts	Demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas	
	View failure as an opportunity to learn; understand that creativity and innovation are part of a long term, cyclical process of small successes and frequent mistakes	

Figure 2. Definition of Creativity (P21, 2011).

Undoubtedly, creativity and innovation skills cannot be separated from each other and with the help of this integration, 21st century learners are able to direct their own goals, sharing their ideas and produce novel ones with each other by using the 4Cs (communication, collaboration, creativity and critical thinking) effectively. Albert Einstein states the importance of creativity and innovation by saying “The true sign of intelligence is not knowledge but imagination”.

2.6. Critical Thinking

Among 21st century skills, critical thinking is the ability to use a number of cognitive processing skills such as analyzing, evaluating, problem-solving, constructing

and creating ideas, which refers students to think deeply and solve unfamiliar problems in different ways (Kivunja, 2015). As a skill, critical thinking is one of the key elements for a learner to trigger their mind and schema, to learn better and improve academically; furthermore, it brings success in daily life.

21st century skills cannot be separated from each other and they have a significant role on learners' and teachers' development in their learning and teaching context. Yeni (2018) states that to acquire the skill of critical thinking, students should be able to reason effectively, use thinking systems**,** make judgments and decisions, and solve problems. Critical thinking and problem-solving concepts consist of using types of reasoning such as cause-effect reasoning, deductive-inductive reasoning, comparative reasoning and the choice of reasoning types depends on a situation. Critical thinking also allows students not only to analyze and comment on ideas, knowledge, beliefs and data, but also help them to evaluate alternative points of view. In 2012, Trilling and Fadel emphasized the importance of critical thinking and problem solving by claiming that achievements of more advanced solutions and more conventional and innovative ways are needed for non-familiar problems, more significant questions should be asked and specified, different perspectives and opinions must be evaluated.

Although the critical thinking skill is one of the 4Cs among 21st century skills, there is still a lack of information and a unified definition about this skill. Grosser and Lombard (2008) specify that in literature there are a variety of explanations for critical thinking however it is difficult to reach the exact, uniform and one-size-fits-all definition. There are many sides of critical thinking skills such as reflective, comparative, analyzing and there are many underlying reasons such as morals, beliefs and norms preventing researchers and scholars to reach the correct definition of critical thinking.

For example, Koehler et al. (2011) emphasizes that supporting individuals to think, making decisions and evaluating are the signs of critical thinking, whereas Ennis (2001) defines critical thinking as a reflective skill by asking thought-provoking questions, on the other hand, Paul and Elder (2009) define critical thinking skills as an act of art which includes analyzing and thinking based on reasoning skills.

The definition of the critical thinking is still a question waiting to be answered for decades and nowadays the research and the focus is on the awareness of the teachers and their implementations of critical thinking skills in a teaching environment. Bedir and Petek (2015) indicate the variety of studies and research both in Turkey and in the

world, however, the results have shown the level and the tendencies of critical thinking are either at a medium or low level in Turkey. Therefore, critical thinking skills awareness and ways of implementation of this skill to teaching contexts are required by providing some improvements for prospective teachers' perceptions and how to implement it in teaching contexts instead of searching for a correct definition or describing their potential thinking skills. Teachers' professional development and training are needed to find out what critical thinking entails, benefits of critical thinking, infusion and integration of critical thinking to the teaching context.

According to P21 (2011b), a critical-thinker is able to criticize, examine, interpret the issues from different perspectives and dimensions, in order to reach and acquire the target aim by using basic and logical meanings, with the help of reasoning, investigating, problem-solving and by using critical thinking skills, some learning outcomes are achieved such as:

- Analyzing the interaction between overall outcomes in complex systems
- Criticizing and evaluating evidence, claims, beliefs and judgments
- Investigating major alternative points of view and different perspectives
- Ability to make connections between ideas and arguments
- Interpreting the information of the data and the ability to draw conclusions
- Reflecting critically on learning experiences and processes
- Using conventional and innovative ways to solve unfamiliar problems
- Ability to ask and identify significant questions and answer the questions to reach better solutions (P21, 2011b, p.9).

Li (2016) indicates the importance of teachers' motivation and awareness of the usage of critical thinking skills help learners' learn better in their learning process as a key to open the doors to analyse better, reason effectively, interpret and evaluate the tasks in the learning process. Thus, both teachers' and students' motivation is directly related to the usage and integration of the critical thinking skills to the classroom context.

For language learners and teachers, modelling critical thinking skills and the ability to use them during the learning process help in building a more successful environment and enrich the quality of teaching (Brookfield, 1997).

2.7. Digital Literacy Skills

Apart from the 4C's (communication, collaboration, creativity and critical thinking), there are some other important skills which should be taken into consideration and among these skills, learning digital literacy skills and knowing how, when and where to use have a huge impact in language learning and teaching processes. In 1997, Glister defined the meaning of digital literacy skills by referring to "the ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers" (p.1).

Recently, technology has gained greater importance again, especially because of the new era known as the 21st century which consists of globalization including a variety of skillsets for both academic and daily lives and the problem of coronavirus which has prevented teachers to conduct face to face lessons. As a result of these changes and challenges teachers start to teach online, online classrooms have been established, children start to learn these digital skills naturally as if they were learning something without realizing that they are learning (Andersen, 2002), additionally knowing the usage and benefits of the media and information and communication technologies skills (ICT skills) have become vital to acquire the target subjects in education.

Digital literacy skills include information literacy skills, which are a set of skills that enable the users to access and evaluate information and use and manage information, media literacy skills, which provide access to what, analyze, create and evaluate the media tools and ICT (information and communication technologies skills) literacy skills known as the ability to use communication tools and technology effectively (Yeni, 2018).

2.8. Life and Career Skills

Being aware of these skills and the importance of them is insufficient regarding the continuous change in the global world. Individuals must be able to transmit these skills in their daily life to be successful both academically and personally and with the help of this transmission the term "global citizenship" has been started to be used in the fields of business, education, economics and politics.

Life and career skills are the scaffolders for a person to create lifelong opportunities serving to use the 21st century skills in life, occupation, and education.

Jenkins, Clinton, Purushotma, Robinson and Weigel (2006) indicated that to create lifelong learners who are capable of achieving targets beyond classrooms, life and career skills can be separated into three categories to understand the importance of them, these categories can be formed as (a) effectively managed and well-developed organizational efforts, (b) ability to coordinate information and organization and (c) development of intangible and tangible products to solve problems during any stage of life and career.

The Partnership of 21st Century Skills suggests that an effective teacher must teach and prepare students for their future life and career, for this reason, teachers need to know that students should be able to adapt themselves to changing situations and they need to be flexible, additionally they should manage and set their own self-directional goals by managing time effectively and they must build their self-confidence to work independently, in addition, these students should have the ability to decide on their own.

Teachers, educators and school administrators must support the idea of continuous professional development to raise awareness and implementation of these 21st century skills in the learning and teaching context, in addition to these professional teacher training programs, seminars, conferences and training should be organized by administrators and the governments for every country to improve enlightened eclectic teachers' skills and experience for the new generation.

2.9. Teachers' Professional Development and Teachers' Education in the 21st Century

Teachers are accepted as not only the main stakeholders in the education process but also are the keys to be able to reform initiatives (Bedir, 2019b) and in order to keep up to date with the global world and changes, the starting point must be the teachers. To improve students' perspectives and skills and to prepare them for a better future, teachers must be aware of the importance of the professional development which is a range of formal and informal processes and activities provided to teachers to engage, encounter and exploit teaching and learning outcomes efficiently, both inside and outside of the school environment, for the purpose of improving teaching knowledge and skills (Jackson & Davis, 2000).

Professional development should be continuous, with a target, and integrated into teachers' workdays (National Staff Development Council, n.d., cited in Franklin & Kariuki., 2009). To be an effective 21st century teacher, it is vital to have the

knowledge and the idea of 21st century skills with their implementation to the teaching environment, which enable teachers to teach efficiently by integrating these skills and raising awareness towards them. Many nations around the world have realized the importance of these 21st century teaching and learning skills and they have started to undertake many reforms in the field of education such as adapting curriculums, changing instructions and reforming assessments in order to prepare students for a better life and career journey in the 21st century. Additionally, among these rapid changes, teacher preparation programs and in-service training have been developed and they have started to take a crucial role to develop teachers professionally and shed a light for teachers to answer some questions such as what to implement, how to conduct and when to use these skills in teaching and learning environments (OECD, 2012).

Educators are the key factors in the system of education, therefore teachers' awareness of these skills and the necessary acknowledgment are crucial to identify the gap between their actual classroom practices and beliefs, to find out the level of benefit and support of these 21st century learning and innovation skills, whether they provide educational reforms in terms of globalized world needs or not (Sang et al., 2018). Thus, the purpose of current research is to find out the teachers' perceptions, implementations and their awareness of 21st century learning and innovation skills.

Teachers are the inspiration and motivation for their students, hence the starting point of the reforms and the changes must be the teachers to enhance students' perspectives and success in this era. To improve students' achievements, educators' perspectives toward 21st century skills must be empowered with 4Cs and innovative thinking, problem-solving and decision-making skills (Osman & Başar, 2016).

Undoubtedly, 21st century learning and innovation skills must be integrated into every field of life for both learners, and teachers, additionally, teachers are the reflective practitioners in this situation globally. Continuous professional development ideas and tools are the key requirements for a permanent change in the world. Gibson and Brooks (2013) explain professional development experiences as follows:

- Ongoing and intensive,
- Coherent,
- Connected to broader school goals,
- Connected to other professional development opportunities,

- Content and curriculum focused,
- Based on teachers' needs,
- Delivered in meaningful ways,
- Relevant through active learning,
- Usage of collaboration, modelling and affordances for practice and feedback
- Teacher controlled and administration supported.

Being able to organize and create an effective 21st century skills training and professional development program requires an understanding of these skills and finding out the gaps between traditional ways and the new era's necessities. Recently, technology has gained its importance especially due to the coronavirus pandemic, the interest towards online teaching and webinars has increased globally, which refers the idea of implementation and the usage of the 21st century learning and innovation skills not only in schools but also out of, both using face-to-face interaction and online platforms.

Therefore, teachers should become an effective participant and an observer to this changing world and they should learn the new technologies, skillsets and requirements to help their students learn better.

To summarize, teachers' continuous professional development plays an important role in improving the implementation of 21st century learning and innovation skills and teachers' actual practices and awareness of these skills help learners to become more successful in their life both academically and professionally.

2.10. Summary

In the light of this general background and related literature review, the purpose of this study is to observe teachers' perceptions on 21st century learning and innovation skills by conducting an exploratory case study in a private college in Adana, Turkey. This study also serves to increase awareness of 21st century skills and helps teachers' professional development by providing a seminar and a discussion paper about this topic. This study includes an on-going process, with an interview and questionnaire, training, feedback and reflection, which are the key factors of successful professional development for teachers. The Teaching and Learning International Survey (TALIS) defines professional development among teachers, "Professional development is defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher." (OECD, 2009b).

CHAPTER III

3. METHODOLOGY

3.1. Introduction

It is obvious that the world is changing and our education system needs to respond to this change with the help of raising awareness and the implementations of 21st century skills. Instead of building a future for the next generation, we can build our generation for the future. It is our priority to use advantages, ideas, opportunities and prepare our students for real-life by connecting our teaching with 21st century skills and provide the necessary skills for their success. Ross (2017) claimed that 21st century skills are essential for our students if we want to prepare them as successful individuals for their academic and work-life both in schools and daily lives.

To keep up to date and become enlightened eclectic teachers in our field, developing our awareness and practices of 21st century skills is as important as developing ourselves professionally. The goal of 21st century skills is not only educating learners but also forming effective citizens, workers and leaders. The education consists of affordances, waiting for us to discover, engage, encounter and exploit. In light of this general background, the purpose of this study is to investigate EFL teachers' perceptions on 21st century skills and develop the pedagogical implementation of these skills by conducting an exploratory case study in a private college in Adana, Turkey. This chapter includes research design, setting and participants, data collection procedures, data collection tools, and data analysis.

3.2. Research Design

This study is designed as an exploratory case study aiming to explore EFL teachers' perceptions on the 21st century learning and innovation skills and develop teachers' pedagogical implementations of 21st century skills in a private college in Adana, Turkey. The exploratory case study includes collecting and analyzing both qualitative and quantitative data within a study consecutively. Ivankova, Creswell and Stick (2009) identifies that the procedure of mixed-methods consists of integrating qualitative and quantitative data to the same study in order to understand the research

better. In a similar vein, Dörnyei (2007b) explained that choosing mixed methods research design helps to obtain more reliable data for a study.

This mixed-methods exploratory research involves a group case study, which requires an in-depth investigation (Zainal, 2007). Depending on the nature of the information to be gathered, different instruments were used to conduct the study. A questionnaire, an interview, a seminar with a KWLA chart (know, want-to-know, learn, action) and a reflection paper of participants on their teaching process in the classroom which includes 4Cs (communication, collaboration, creativity and critical thinking) as 21st century skills were used as data gathering tools.

To collect data, case analysis was employed with a questionnaire as the first step of the procedure with 105 participants in Turkey. After the questionnaire, interviews were used to obtain detailed information from the participants about their 21st century skills' knowledge and awareness. As a following step of the interviews, a seminar was organized for the participating teachers in order to broaden their horizons about the ideas and perceptions of the 21st century learning and innovation skills. During the seminar, the participants were asked to complete a KWLA chart about what they knew, what they wanted to learn, what they learned and what kind of implementations they would take after this seminar in their teaching contexts. As a last step of the study, the participants were supposed to be observed by the researcher in their teaching contexts to investigate the usage and the level of pedagogical implementations of the 21st century learning and innovation skills. However, because of the effect of corona virus problem, schools were closed and online education has gained a role in teaching and learning processes in this academic year. Therefore, the researcher has had to change the last step and asked participants to prepare a lesson plan including 4Cs and the 21st century learning and innovation skills. Furthermore, the participants were asked to prepare a reflection paper about their lesson plans and highlight the key points and events that they might encounter during the process of their teaching by using these lesson plans such as students' reactions, their ideas, beliefs and perceptions, the advantages and disadvantages, strengths and weaknesses, challenges and opportunities.

The main aim of this mixed-methods exploratory case study is to find out teachers' perceptions on the 21st century learning and innovation skills and develop them pedagogically. Additionally, teachers' beliefs and perspectives about 21st century skills were investigated and the researcher aimed to raise awareness and the usage of these skills with this study. The researcher was already working in the context of the

research where the qualitative data was collected, and no specific criteria were used to utilize convenience sampling for both the qualitative and the quantitative part of the research. Convenience sampling is a way of choosing participants who are easily accessible to the researcher (Etikan, 2016). While the quantitative part of the study, which is a questionnaire, was conducted with 105 English language teachers from different parts of Turkey, the qualitative parts of the study, which are an interview, a seminar with a KWLA chart and a reflection paper of the participants from their teaching process, were employed with 10 English language teachers at a private school in Adana, Turkey.

For the quantitative part of the study, the questionnaire was administered in both traditional paper-pen format and online format. The main aim of the questionnaire as case analysis was to investigate the level of implementation of the 4Cs (communication, collaboration, creativity and critical thinking) and teachers' readiness to conduct these skills in their teaching context, for these reasons, the questionnaire consists of forty items with 5 point Likert-scale and 5 open-ended questions to figure out the usage of the 21st century learning and innovation skills and teachers' perspectives, ideas and beliefs towards these skills.

As a qualitative part of the study, a semi-structured interview was conducted with 10 participants who have been working in the same school, after the interview, a seminar "My Recipe… Looking at the 21st century" was organized with the same participants by a teacher trainer, Elna Coetzer, as a part of the study. During and after the seminar, the participants were asked to complete a KWLA chart which consists of 4 columns, about what the participants knew before the seminar, what they wanted to learn from the seminar, what they learned after the seminar and how to take any action as a result of the seminar. As the last step of the qualitative part of the study, the researcher asked the same 10 participants to prepare a lesson plan including 4Cs and conduct these lesson plans as part of their teaching context. They were also asked to prepare a reflection paper right after the lessons regarding some key events such as the strengths and the weaknesses of the lesson, possible challenges and positive/negative sides of using 4Cs in their teaching process, attitudes, beliefs and behaviors of the students' and their own. Additionally, for the reflection paper, the participants were asked to describe their lessons and the results of the implementations and usage of 21st century skills.

As a result of using a mixed-methods exploratory case study, both numerical data and narrative data were obtained. Using a variety of data collection tools not only empowered the trustworthiness of the study but also helped the researcher to analyse data intensely.

3.3. Research Setting and Participants

The qualitative part of this sequential mixed methods exploratory case study was carried out at a private school in Adana, in Turkey. This school consists of a kindergarten, a primary school, a secondary school and a high school. There are 18 English Language teachers in the school. Two of the English language teachers are working in the kindergarten, 11 English language teachers are at primary and secondary school and 5 English language teachers are working at the high school They have 16 – 36 hours of lessons each week. 4 of the teachers have their Master's of Art degree and the rest of the group have their bachelor's. The teachers' ages are between 24 – 45, (which contributes towards a dynamic group) and they have different educational backgrounds. Furthermore, they have different years of work experience. Some of them are in the middle of their career and some in the beginning. During their academic careers, they attend seminars, conferences and workshops for their professional development.

They have weekly meetings in which they discuss new ideas, current studies and they sometimes make peer-observations and reflect on the approaches, methods and techniques of their colleagues. In other words, in this dynamic group, peer support is seen as crucial to develop and reach higher and expected levels of education, as members share problems and experiences, the rest of the group provide a powerful sense of companion by understanding and scaffolding, which can lead to the pedagogical usage of 21st century skills and improve awareness of them. With the help of this study, the group will also have a chance to promote their professional development.

This study was carried out as a group case study by conducting an exploratory research. The participants for the qualitative data are 10 English language teachers from different parts of the school. 3 primary teachers, 4 secondary teachers and 3 high school teachers were chosen by convenience sampling. Some teachers are in their 3rd year at the same school and some are in their 1st year. The working experience of the teachers

are heterogeneous. Two of the teachers are native speakers who have different educational backgrounds and studies in their bachelor's degree in their countries. There are two teachers who have their master's degree and worked as head of departments. The age of the participants is between 24 – 50, providing an opportunity to the researcher to confront different educational backgrounds, teaching experiences, techniques, methods and approaches. Their working hours are different from each other, some of them have 16 hours of lessons per week, on the other hand, some of them have 35-36 hours of lessons. The difference between participants in terms of age, gender, educational background and experience increases the validity of the study by providing a variety and a range of data. At the end of the study, results were obtained from different types of teachers, which means this variation can shed light on a wider perspective of the English Language teaching field about 21st century skills usage, awareness, perceptions and their pedagogical implementation in classroom practices.

A consent form was provided to these 10 participants and a suitable time was arranged and the study organized accordingly as a qualitative part of this research which includes an interview, a seminar with a KWLA chart and a lesson plan with a reflection paper. These participants also took part in the quantitative part of the study and they were asked to complete the questionnaire.

As a quantitative part of the study, 105 participants were chosen with convenience sampling, which allows the researcher easy access to English language teachers in Turkey, both paper-pen format and an online format were used to conduct the questionnaire and answer the open-ended survey questions at the end of it.

Saunders, Lewis, and Thornhill (2012) explain that in convenience sampling it is possible to invite all subjects to participate in the study without specific criteria. For the questionnaire, 105 of the English language teachers from Turkey participated and 10 of them were the teachers who participated in the qualitative part of the study in a private school in Adana. The researcher has been working as an English language teacher at the same school for three years, therefore, the choice of the participants and the usage of convenient sampling makes it simpler and easier to collect relevant data about this topic.

3.4. Data Collection Procedure of the Study

In order to collect data, both qualitative and quantitative data collection tools were used in this study, which are a questionnaire, an interview, a seminar with a KWLA chart and a teacher reflection paper with a lesson plan. As Zohrabi (2013) claimed, using different types of data collection tools and obtaining the information through different sources can increase the trustworthiness of the study in terms of reliability and validity of the data and the interpretation of them.

3.4.1. The Questionnaire

Questionnaires measure attitudes, opinions, beliefs, interests and values by asking factual questions which are also known as classification questions or subject descriptors (Dörnyei, 2009). In this study, a 5 point Likert-scale questionnaire which consists of forty items, was used as the closed type section and six items which include open-ended questions were used, additionally, there was a table for participants to emphasise the level of usage of 21st century learning and innovation skills which are critical thinking, creativity and innovation, problem-solving, communication and collaboration.

The questionnaire was prepared for English language teachers in the target language, it has items to investigate the teachers' awareness and pedagogical implementations of 21st century skills in an in-depth way. The main aim of the questionnaire is to conduct case analysis which is a process to determine the items that should be included in the exploratory research (Dudley-Evans & St. John, 1998). The questionnaire was developed by Bedir's study (2017) of 21st century skills. The questionnaire incorporates statements about 21st century skills and their sub-categories. 105 English language teachers have participated in the questionnaire which consists of a 5 point Likert-scale that allows the participants to choose the appropriate options. The highest option of the questionnaire is "always true for me", and the following options are "usually true for me", "sometimes true for me", "usually not true for me", and the lowest option is "never true for me". The questionnaire involves 40 multiple choice questions, five open-ended survey questions and one table to be filled (see Appendix A). The participants were informed before the questionnaire and the consent forms were provided.

In the questionnaire, there were 3 sets of questions, for the first set of the questions there were four main categories with sub-titles, for the second set of questions there was a table with five items and the level of emphasis which were “strong emphasis”, “moderate emphasis”, “little emphasis”, “no emphasis” and the last part of the questionnaire involved five open-ended questions for participants to answer.

Table 1.

Main Categories and Sub-titles of the Questionnaire

Communication And Collaboration	**Creativity And Innovation**	**Critical Thinking And Problem Solving**	**Reflection And Awareness**
Communicate Clearly	Think Creatively	Think Critically	Metacognition(Thinking about our thinking)
Collaborate with Others	Work Creatively with Others	Make Judgments and Decisions	Reflect and Synthesize
Think Interdependently	Apply Past Knowledge to new situations	Ask Questions	

Table 1 shows the main categories of the first set of the questionnaire with their sub-titles which were directly related to 21st century learning and innovation skills, thus the participants were supposed to choose options according to their awareness, knowledge and implementation of these skills in their teaching context.

3.4.2. Interviews

Interview questions, which were semi-structured and open-ended questions, were developed by the researcher, considering the purpose of the study and the research questions, additionally, the interview was piloted before the study which also enhanced trustworthiness. According to Kabir (2016), using semi-structured interviews provides a

clear set of instructions for the participants and they help researchers to obtain qualitative data which can be reliable and comparable.

By conducting interviews in the study, the researcher aimed to support the quantitative data and procure detailed information about the participants' knowledge, perceptions and awareness of 21st century learning and innovation skills. Interviews were conducted with English language teachers before the seminar and the reflection paper in order to understand the level of awareness and practices of 21st century skills in their classroom context (see Appendix B). The interview had ten questions that sought to answer teachers' perceptions and awareness of 21st century skills and their pedagogical implementations of these skills to classes. The same consent form, which was used for the questionnaire, was provided and the participants were informed before the interview (see Appendix C).

Interviews were conducted with the 10 participants who have been working as English language teachers at the same private school in Adana, Turkey however, the participants were teaching different levels of students, from kindergarten to high-school, which provide a wide range of different data. Interview questions were prepared to serve the research questions and related literature. Questions inquired about teachers' knowledge, awareness, implementations and usage of the 21st century learning and innovation skills.

Interviews were conducted in the school settings, in order to assure a familiar environment for the participants and they were held during the break time or free class times, in the department room in a quiet space. Interviews were audio-recorded and transcribed verbatim to clarify and indicate any behavioral answer whilst asking or answering questions. Since the teachers are English language teachers, interviews were held in the English language. Four of the participants were male and six of them were female and they participated voluntarily – for this reason, convenience sampling was used by the researcher for this part of the study.

The consent form, which was provided to the participants by the researcher, indicated the use of pseudonyms when needed for the proof from the interviewee's sentences and to consider the anonymity issue. The interview questions were prepared according to the questionnaire to increase consistency and decrease the degree of bias.

3.4.3. The Seminar with KWLA Chart

In this global world, everything changes continuously and gradually, therefore among these changes, teachers need to keep up to date by taking advantage of professional development options such as seminars, conferences and self and peer observations. For this reason, the researcher scheduled a seminar related to the study for the participants and prepared a KWLA chart which includes "What I know", "What I wanted to learn", "What I learned" and 'What steps I can take for the action" (see Appendix D). The participants were informed before the seminar about the chart and the same 10 participants were involved in this part of the study in order to ensure consistency and obtain reliable data.

The seminar was held as an in-service training after school hours at the conference hall, and the topic of the seminar was "My Recipe… Looking at the 21st Century" presented by Elna Coetzer who has been working as a teacher trainer and educational consultant in Turkey. In-service training are fruitful for teachers in terms of providing the opportunity to extend their teaching experience with gaining insight, additionally, they are good at reflecting on teaching practice and dealing with challenges (Hiep, 2001). The seminar included 21st century learning and innovation skills and how to implement them in our teaching context pedagogically. Participant teachers have attended the seminar interactively and noted down key events and factors to the KWLA chart for the research. KWLA charts were redelivered to the researcher after the seminar in order to support the qualitative and quantitative data.

3.4.4. Lesson Plans and Reflection Paper

After conducting data collection tools which were mentioned above, as a last step of the study, the researcher asked participants to prepare a lesson plan including 4Cs (communication, collaboration, creativity and critical thinking) and reflect on their lessons by taking into consideration some issues such as the challenges that occurred during the processes of teaching and learning, differences in their teaching methods, techniques and approaches between before and after the seminar, positive and negative sides of their lessons and teachers' and students' perspectives. Using a reflection paper as a data collection tool is a matter of reflective teaching which enables professional development, supports student-centered teaching and brings into alignment teacher's underlying beliefs and classroom practices about learning and teaching (Jordan, 2019).

The researcher asked participants to provide both lesson plans and the reflection papers together in order to understand key points and investigate the process better. Additionally, with the help of the lesson plans, the researcher was able to visualize the flow of the lessons which were prepared by the participants who are English language teachers. The lesson plans were from different grades, including kindergarten, primary, secondary and high-school parts of the school. Using a variety of lesson plans from different grades was fruitful for the researcher to analyze and obtain real data for the study. Due to being an exploratory case study, these reflection papers were also used for general feedback of the participants about current research.

Figure 3 highlights the summary of the data collection procedure of this exploratory case study.

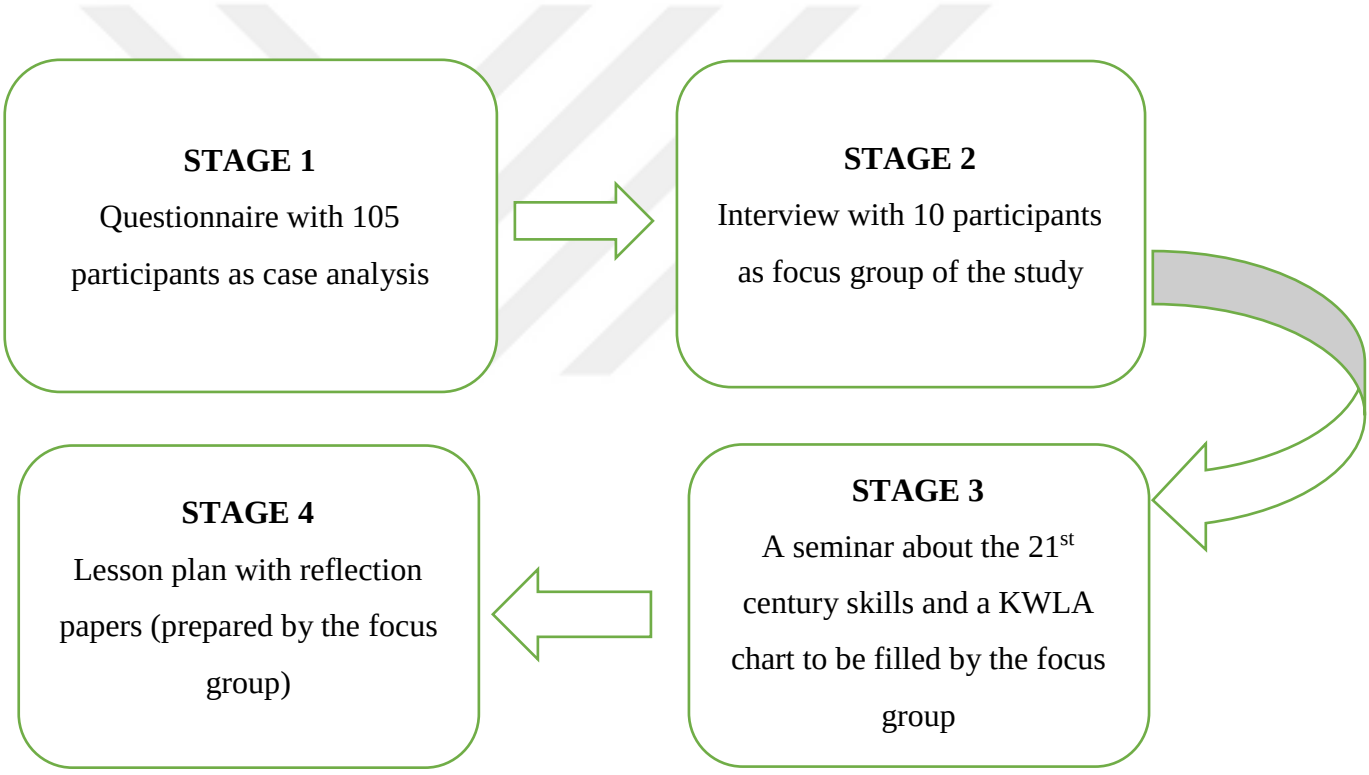


Figure 3. Procedure of the Study

3.5. Data Analysis

The approach to data collecting and analysis was both qualitative and quantitative. The interviews were transcribed verbatim and immediately. Content analysis was used to develop codes and categories, that is, emergent coding was chosen by the researcher. In emergent coding, codes are created after the texts, with categories and their sub-categories (Stemler, 2001).

To analyze the data of the questionnaire, descriptive statistics was used in this study. Descriptive statistics present a summary of data in terms of mean, median and mode (Ali & Bashkar, 2016). Starting with the teachers' responses to the questionnaire were entered into Statistical Package for the Social Sciences (SPSS) in quantitative data sets incorporating 105 teachers' questionnaires. The negatively worded statements were recorded before calculating the composite scale scores. A five point Likert-scale format was used for the answers of the items, from the highest to the lowest degree of usage and awareness of 21st century skills of teachers. Frequencies, percentages, mean scores and standard deviations were calculated. The data analysis for the questionnaire was employed to determine teachers' perceptions, awareness and their pedagogical classroom implementations of 21st century skills in their teaching contexts.

The responses for KWLA charts were conducted by the participants during or after the seminar, field notes and key events were taken during the process of the seminar. The data was analyzed in qualitative ways for the overall analytical strategy. The data was perceived in three different categories to increase reliability and validity of the study, as Patton's research (2002) indicates that positivism, constructivism and the critical theory refer to a criterion for judging the quality of qualitative research.

The analysis of the data of teacher reflections were conducted in qualitative ways. Coding and categorizing procedures were followed in an appropriate way to empower the reliability of the study's results. Teachers' reflection papers were employed to shed a light on the main categories and sub-categories that the researcher had after the interviews. Using more than two types of data collecting ways provide triangulation which increases the validity of the research.

All the results which were obtained through data collection tools were interpreted in accordance with the research questions from the perspective of 21st century learning and innovation skills. Results were prepared and presented in the Findings Chapter.

CHAPTER IV

4. FINDINGS

4.1. Introduction

The qualitative and quantitative findings of the study are presented in this chapter. The purpose of this research is to explore EFL teachers' perceptions and their pedagogical implementations of the 21st century learning and innovation skills by conducting an exploratory case study. Additionally, English language teachers' awareness and usage of the 21st century skills are investigated. Importance of continuous professional development for teachers and educators is emphasized with the help of this study. This study also developed to figure out the kind of practices and implementations in the classroom context.

With the help of the findings, the following research questions will be answered and the study will shed a light on for further research. All research questions will be taken into consideration and the data was analysed in both qualitative and quantitative ways. The questionnaire has open-ended questions which were analysed in the qualitative part of the study along with the interviews, KWLA charts and reflection papers. The research questions of the study are:

1. What are the perceptions of EFL teachers on 21st century learning and innovation skills?
2. How do professional development activities contribute to EFL teachers' understanding of 21st century skills?

4.2. Interpretation of the Questionnaire Data

The main purpose of the questionnaire is to investigate teachers' perceptions and awareness and knowledge of the 21st century learning and innovation skills and the implementations of them in an in-depth way. The questionnaire was developed by Bedir (2017) and it has forty items to be answered with 5-point Likert Scale with following values: (1) never true for me; (2) usually not true for me; (3) sometimes true for me; (4) usually true for me; (5) always true for me. Qualitative data has been supported with the second part of the questionnaire which includes a table with five items and the level of

emphasis when practicing the 4Cs. The last part of the questionnaire consists of five open-ended questions which were also analyzed within the qualitative findings of the study.

A mean score of 4 and higher than 4 (mean score ≥ 4) was accepted as a strong level of implementation and awareness of the 21st century skills, and a mean score of 3 was accepted as a medium level of usage and knowledge, and a mean score lower than 3 (mean score < 3) was accepted as a weak level of practice and awareness of these skills in the classroom context. The main categories of the questionnaire were shown as "communication and collaboration", "creativity and innovation", "critical thinking and problem solving", "reflection and awareness" (Table 1). Table 2 provides the details of the questionnaire including some items from these main categories and presents information about teachers' awareness and implementations of the 21st century learning and innovation skills.

Table 2.

Descriptive Results of the Main Categories of the Questionnaire (Implementations and Awareness of 21st Century Skills)

	Question	**Mean**	**Std. Deviation**
Communication and Collaboration	I can articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.	4,35	0,82
	I can use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade).	4,54	0,73
	I can share responsibility for collaborative work without dominating.	4,38	0,87
	I am aware that a group can accomplish more than an individual	4,33	1,00

Creativity and Innovation	I can create new and worthwhile ideas.	4,29	0,85
	I am open and responsive to new and diverse perspectives.	4,58	0,64
	I can take abstract meaning from one experience, carry it forth, and apply it in a new and novel situation.	4,25	0,82
Critical Thinking and Problem Solving	I can analyse how parts of a whole interact with each other to produce overall outcomes in complex systems.	4,16	0,88
	I can interpret information and draw conclusions based on the best analysis	4,29	0,75
	I can ask questions at all levels of Bloom's Taxonomy of Thinking, but match the purpose with the correct type of question.	3,90	0,99
	I can solve different kinds of non-familiar problems in both conventional and innovative ways.	4,06	0,87
Reflection and Awareness	I know what I know and know what I do not know.	4,45	0,84
	I reflect critically on my learning experiences and processes.	4,42	0,75

Note. (n=105)

As shown in Table 2, most of the items related to implementation and awareness of the 21st century learning and innovation skills generated a mean score above 4, between the options which are “usually true for me” and “always true for me” apart from one item which is about critical thinking and problem solving, item number 31 that includes a sentence which is “I can ask questions at all levels of Bloom’s Taxonomy of Thinking, but match the purpose with the correct type of question.” The items above a mean score of 4 yield an inclination to positive, and it is observable that there is a correspondence among items. Item number 13 “I value the individual contributions made by each team member.” and item number 9 “I use social skills in order to avoid conflict and maintain happiness.” have the highest mean scores (respectively 4,63 and 4,58). Item number 19 “I am open and responsive to new and diverse perspectives.” has also one of the highest mean scores among the items which is 4,58. These items demonstrate that communication, collaboration and creativity skills are being implemented by teachers and the awareness of these skills is high among teachers. Item number 31 had the lowest mean score which was below 4, the item was about the levels of Bloom’s Taxonomy of Thinking and this was the part of the questionnaire that included critical thinking skills, it can be concluded therefore, that teachers need to develop and focus on critical thinking skills more than the other 4Cs. The administrators and curriculum can organize professional development seminars, conferences and trainings for teachers and prospective teachers to improve this skill including the issue of Bloom’s Taxonomy of Thinking. While the majority of the participants were aware of the 21st century learning and innovation skills and according to the results the teachers implement these skills in their teaching contexts, however as it is seen from the item number 31, teachers need to be supported with the help of professional development organizations.

In order to investigate teachers’ beliefs and perceptions about 21st century skills, according to the answers that were given in the questionnaire the researcher analyzed the frequency of the option 5 which is “always true for me”. The participation levels in the option 5 provide the consistency between mean, standard deviation and frequency (Table 3).

Table 3.

The Participation Level in the Option 5 (Always True for Me)

No.	Item	Option 5 "Always True for me (%)
3.	I can use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade).	64,8
4.	I can utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact.	40,0
13.	I value the individual contributions made by each team member.	71,4
19.	I am open and responsive to new and diverse perspectives.	63,8
27.	I can analyse how parts of a whole interact with each other to produce overall outcomes in complex systems.	40,0
31.	I can ask questions at all levels of Bloom's Taxonomy of Thinking, but match the purpose with the correct type of question.	31,4
32.	I can solve different kinds of non-familiar problems in both conventional and innovative ways.	36,2
33.	I can identify and ask significant questions that clarify various points of view and lead to better solutions	42,9
34.	**I know what I know and know what I do not know.**	**61,9**

According to the participation levels in the statements in terms of choosing the option 5 which is “always true for me”, it is shown that item number 13 had the highest percentages which is 71%. This result has shown that the English language teachers in Turkey give importance to the skill “collaboration” and they are aware of that in order to complete a task or reach the goal that every individuals’ contributions are needed in the teaching context. However, as it is shown in Table 1 with the lowest mean score, the item 31 had the lowest percentages among the items of the questionnaire which leads teachers and educators to improve more in the field of critical thinking skill in an effective way. The table also shows us that the lowest percentages among the items belong to the skill of critical thinking in 4Cs. Turkey’s English language teachers are aware of the lack of implementations and knowledge about the skill of critical thinking on the other hand they are aware of the implementations and the usage of the other skills in 4Cs which are communication, collaboration and creativity.

Both of the tables sum up that teachers are aware of the 21st century learning and innovation skills and they implement them a lot in their classroom context. There are 40 items related to these skills and 39 of the 40 items indicated a mean score higher than 4 which means that English language teachers in Turkey are practicing these skills and they have knowledge of them. The 4Cs are all interrelated with each other and the practices of 4Cs change from teacher to teacher, the way of practising these skills also effects the answers of this questionnaire. Teachers and learners have the formative roles for the researcher to obtain these findings from the questionnaire.

Apart from these 40 items, there was a chart in the questionnaire in order to figure out the level of emphasis on the 21st century skills which are given as “critical thinking”, “creativity and innovation”, “problem solving”, “communication” and “collaboration”. Table 4 explains the level of emphasis on each of the skills with their frequencies.

Table 4.

The Level of Emphasis on 21st Century Skills (%)

Skills	**Strong Emphasis**	**Moderate Emphasis**	**Little Emphasis**	**No Emphasis**
Critical Thinking	46,7	37,1	14,3	1,9
Creativity and Innovation	49,5	36,2	11,4	2,9
Problem Solving	57,1	29,5	11,4	2,0
Communication	75,2	16,2	5,7	2,9
Collaboration	63,8	23,8	10,5	1,9

Note. (n =105)

Table 4 indicates that English language teachers who have participated in the study give emphasis to communication skill mostly as it is seen 75,2% however critical thinking skills have the lowest score on the "strong emphasis" option which is 46,7%. The highest "no emphasis" score is communication skill with 2,9% but the lowest score of "no emphasis" are collaboration and critical thinking skills as they are 1,9 %. 37,1% of the participants have put moderate emphasis on critical thinking skill and this is the highest "moderate emphasis" score among the skills. As it is seen in Table 4, skills can be put in order as communication, collaboration, problem solving, creativity and innovation and critical thinking from the highest emphasis to the lowest emphasis. According to the Table 4, less than 50% strong emphasis were given to the critical thinking and creativity and innovation skills by participant teachers in their teaching contexts. Table 4 sums up the idea of usage and implementations of these skills in classroom practices.

4.3. Interpretation of the Qualitative Data with Focus Group

The qualitative data of the research study includes the data gathered from the open-ended part of the questionnaire, interviews, KWLA chart and reflection papers with the focus group of the study. The purpose of the open-ended questions parts of the questionnaire is to find out teachers' beliefs and perceptions about the 21st century learning and innovation skills including their own practices within a specified version. English language teachers' points of views and their answers to these open-ended

questions were contributed positively to the qualitative data of this study. The purpose of the interviews is to be able to have an in-depth investigation about the usage and the awareness of the 21st century skills among 10 participants. These 10 participants have also filled the columns of the KWLA chart after the seminar for the study to help the researcher to support the qualitative data of the study. Afterwards, as a last part of the study, the researcher asked the same 10 participants to create a lesson plan including 21st century learning and innovation skills and write a reflection paper about the lesson plan to observe this research's effects and the view of the participants about their lesson plans.

4.3.1. Open-ended Response Part of the Questionnaire

Among 105 participants of the questionnaire, 9 of them did not answer the question number 2 which was "*Describe a specific activity or strategy used in your classroom that addresses these skills."* 5 of the participants did not respond to the open-ended question number 3 that was "*Describe your confidence in teaching these skills after you completed your teacher preparation program."* The question number 4 "*What could be the underlying rationale that led to the introduction of these skills into curriculum"* was not answered by 6 of the participants. Lastly, the question number 5 which is *"Please provide us with any additional comments you may have about 21st century learning and innovation skills."* was not answered by 28 of the participants.

The researcher gave importance to the consistency between the first set of the questions which includes a 5-point Likert Scale and the third set of the questions which have five open-ended questions.

Open-ended question 1

According to the answers given to the question number 1, most of the participants agreed on the effect and importance of these skills, they mostly used the words "effective", "beneficial", "important" and "crucial" mostly. It is obvious that English language teachers' perceptions on 21st century learning and innovation skills are mostly positive and they are aware of the importance of these skills in both their academic and social life.

*These skills are not only **effective** but also a need for our new era. We as teachers, and students must develop ourselves with the help of these skills, as a kind of professional and personal development.* (P1)

*Language is an ever evolving phenomenon so in my opinion it is **crucial** to arm our students with critical thinking, problem-solving, communication and collaboration skills, which they will need all through their language learning process, all the while inspiring their creativity.* (P4)

*Yes, they are **important** because these skills can be used to prepare learners for the 21st century life.* (P99)

*For sure, these are quite **beneficial** considering teaching of English. When we are trying to give any kinds of subject we have to take all the skills into consideration*. (P89)

The answers that were given to the question number 1 of the open-ended part of the questionnaire has shown that teachers admit the positive role of these skills in their teaching context. These skills improve not only learners' academic success and future, but also develop teachers' professional skills. Only one of the participants disagreed the importance of these skills and emphasized learners' readiness by saying:

*No. If students are not ready to learn, all these are nothing. (*P27)

Open-ended question 2

According to the answers which are given to question number 2, most of the participants have been implementing various activities and strategies which consist of the usage of these skills such as brainstorming, creative drama, role-playing, group work, pair-work, presentations, task-based activities, using technology, online games and competitions and using visuals or authentic materials. Some of the participants describe the activities specifically as it follows:

One day, I decided to have my students choose the topic that they would like to discuss in the class. And they prepared a debate with using and producing some extra materials. I think this is a good example of 4C skills in the lesson. (P103)

Students are given a paragraph in which some target words are written in italics. They are supposed to deduce the meanings of these words from the given context. Then students are divided into groups of three or four. After that, they are supposed to create a short story of their own together with the group members. Their short story should include the target words. (P80)

Open-ended question 3

Most of the participants emphasized that the level of their working experiences and the level of their confidence level are interrelated with each other. Most of them claimed that they feel more confident over time with the help of their experiences, seminars, workshops and other professional development tools. Some responses to this question:

Well as the time passes I feel myself more confident in teaching these skills. It is something related with time, experience and how to adjust them to your students. To understand and interpret those always takes time. (P24)

I consider myself as a teacher who is open to professional development. I am not the same teacher as I was last year. The fact that I do not see the same me currently compared with last year is the experience and professional development activities. Consequently, this gives me confidence that I have and always will be open-minded to the new teaching methods and professional improvement. (P52)

Open-ended question 4

Most of the participants responded that there are many rationales such as globalization, technology, changes in the world, today's era, real-life situations, new developments and requirements to be able to become an effective citizen, leader or a learner in the 21st century.

In the 21st century, it's more important to prepare students for the future than prepare them only academically. A focus on creativity, critical thinking, communication, and collaboration is crucial so as to prepare students for increasingly complex life and work environments. (P103)

However, some of the participants claimed that introduction of these skills into the curriculum needs to be supported and certain professional developments are required to bring these skills in Turkey's national education system.

Less than 10% of these skills are introduced, I believe that even if they are introduced more, these skills are still ignored by the trainers, educators, teachers and administrators. (P104)

Open-ended question 5

The purpose of this question is to investigate teachers' points of view about the 21st century skills or the aim of the study and obtain detailed information from the

participants on whether they wanted to add any extra comments that they may have about this topic. Most of the participants recommended that the education system and the educators need developments to integrate these skills in today's teaching context, developing the implementation of these skills and raising awareness towards these skills would be beneficial not only for the learners but also for the teachers.

21st century teaching provides some competences such as collaboration, critical thinking, communication, creativity, digital literacy and problem solving skills which advocate to believe schools need to teach and help students and teachers to thrive in today's world. (P66)

I believe it would take some time for some teachers to really appreciate this rationale. It is a matter of time and the effort of bringing down our own paradigms and venturing into new, challenging learning experiences. When we get used to this new era, the education system would reach higher places with the help of professional developments and in-class practices which serve to improve both learners and teachers. (P83)

According to the findings which were gathered from the quantitative and qualitative parts of the questionnaire, the consistency between answers of the participants is observable. Most of the participants are aware of these skills but they claimed that professional development and trainings are required to improve the usage of these skills and with the help of the seminars, frameworks, conferences and training programs, teachers would know how to use these skills, when to integrate them into their teaching and in what ways they combine them with their current practices. It is necessary to emphasize that teachers need to be informed about precise pedagogical, terminological, conceptual and cognitive instructions which are aligned with the 21st century learning and innovation skills.

4.3.2. Interpretation of the Interviews

The purpose of the interviews was to find out participants' beliefs, ideas and perceptions about being a 21st century skills teacher, understand their definitions about 21st century skills in teaching English, investigate the level of the implementations and classroom practices of 21st century skills in their school, obtain their ideas about the advantages of being aware of these skills and their current usage in their teaching contexts. Additionally, with the help of the interviews the ideas of participant teachers

about developing the awareness of 21st century skills by the Ministry of National Education (MoNE) was obtained. The participants were asked to answer about the barriers of the implementations of the 21st century skills in our teaching context. With these purposes in mind, interviews were conducted with the 10 participants who are working at the same school as English language teachers. Before conducting the interviews, all of the participants were informed about the study and detailed information about the study was provided. A consent form was prepared for the interviewees before the interviews in order to ensure ethical considerations. Interviews were audio-recorded and transcribed verbatim to clarify and indicate any behavioral answer whilst asking or answering questions. Transcribed data were analyzed by applying the procedure which was mentioned in the Chapter 3 data analysis part.

4.3.2.1 Teachers' Knowledge and Awareness of the 21st Century Skills

The participants were asked to answer questions about their background knowledge, awareness, point of views, beliefs and ideas about the 21st century skills. Interview questions triggered teachers' minds to evoke the information that they have about the topic. Participants answered the interview questions about their knowledge and awareness of these skills as it follows:

For me, 21st century skills in teaching English means collaboration, responsibility, critical thinking, creativity, ICT (Information Communication Technology) skills and information literacy. (Respondent 1)

Integrating internet, critical thinking skills, social networking, creativity and innovation and problem solving skills into your class mean 21st century skills. (Respondent 3)

However, it is observed that some of the participants aren't familiar with these skills and they gave different responses such as:

I think these skills are more technological skills than the ones that we have. And we all know that the children of this century are fond of using the technology. The lessons can be conducted with technological tools as 21st century skills. (Respondent 5)

According to the interview question which was about participants' expectations from providing students with 21st century skills, most of them claimed that students would become more eager to learn, they would start to be involved in the learning

process in a more active way, it would be easier for teachers to garner their attention, interests and participations.

When we provide these skills to our learners, they will be more eager to learn, they will understand the satisfaction of expressing themselves in a foreign language and this will garner their attention and interests. (Respondent 4)

One of the interview questions which was about the meaning of being a 21st century skills teacher was answered by participants in similar ways with emphasizing the importance of professional development, keeping up to date with the changes in the world, improving both academically and personally and being able to organize and manage these skills.

A 21st century skills teacher can find extra-ordinary ways to get students attention, use her/his mind to be more innovative, make students engaged and interested in the lessons. A 21st century skills teacher should always create chances to develop professionally to keep up to changes with the world. (Respondent 10)

According to the interview questions which were about the advantages of being aware of these skills in daily life, the answers of participants were similar as it followed:

Being aware of 21st century skills in daily life can help an individual in terms of improving herself/himself. Learners or teachers can easily adapt the process which consists of the new century's skills thanks to this awareness and with the help of this awareness we can build our future successfully. (Respondent 8)

In the interview, two questions were about developing awareness of 21st century skills and the usage of them in educational context with the support of Ministry of National Education (MoNE). The answers of the participants included that MoNE is aware of these skills however the level of support and training is inadequate for teachers and learners, the focus should be redirected towards these skills instead of the entrances exams for universities and high schools. Most of the participants also claimed that they need to be involved in the process of professional development by attending seminars, conferences and training programs which are about developing and raising awareness of 21st century learning and innovation skills.

MoNE is supportive but the system is mainly focused on the exams and core subjects such as science, mathematics and history. I think MoNE should give importance to this global change and prepare teachers for this era. The national curriculum should be re-organized including the usage of these skills and teachers

should attend teacher training programs to develop professionally about these skills. (Respondent 9)

Participant teachers' responses about the knowledge and awareness of the 21st century skills were obtained as above. The interview questions were prepared to investigate the implementations and the usage of these skills in teaching context.

4.3.2.2. Teachers' Implementations and Usage of the 21st Century Skills

In order to investigate the implementations and usage and level of the 21st century skills, the researcher asked several questions in the interview such as sample activities that they conduct in their lessons including these skills, their school's implementations and classroom practices to increase the usage of them and possible barriers or limitations that prevent implementations of these skills in their teaching contexts.

When the researcher asked about actual classroom practices of the 21st century learning and innovation skills that should be implemented in the classrooms, most of the participants claimed that they were conducting their lessons by emphasizing the skills of collaboration and communication and they reported that their priority is using technological tools effectively. Respondent 1 especially stated that the usage of technology and smartboards help to teach effectively and garner the attention of learners since the new generation are surrounded with the latest technological tools in their lives. Teaching with videos, presentations and playing online educational games have had a huge impact on improving learners' ICT (Information Communication Technology) skills. Additionally, Respondent 3 reported that:

I try to integrate many things into my classes, especially communicative activities with collaborative tasks for example I divide my classroom into groups and give them tasks to complete by researching, asking, gathering information among peers and sharing the ideas. After that I want them to present the results by using the technology such as preparing a presentation or giving examples of their work by using the internet. (Respondent 3)

When participants were asked about the implementations/classroom practices of 21st century skills in their schools, their answers were similar to each other since they work at the same private school in Adana. They stated that their school gave priority to

conduct these skills and integrate them during the classes because the administrators were aware of their importance.

The level of implementation/classroom practices of 21st century learning and innovation skills is high and has a strong emphasis in my school because our school is aware of the importance of these skills and tries its best with the opportunuties that they have to teach and prepare students for the future. (Respondent 8)

As the last question of the interview, the researcher wanted to investigate participants' beliefs about the barriers which prevent the implementations and usage of 21st century skills. Most of the participants pointed out the lack of awareness and knowledge of the teachers, student's background and readiness to changes, inadequacy of the materials included course-books, gadgets, technological tools and lack of support from the MoNE (Ministry of National Education) in terms of providing financial resources and organizing teacher training programs including professional development seminars.

Firstly, children's background… The way that they are raised by their parents… Unfortunately they are not open-minded enough to learn new things or adapt to changes. Secondly, wrong approaches in terms of teaching and learning English… Some teachers refuse to change and they dip back into traditional ways of teaching. As mentioned before, MoNE gives importance to the exams and they develop course books according to these exams. Teachers limited opportunities to develop professionally… (Respondent 4)

In public schools they do not have even a computer room or smartboards, as teachers we do not have enough financial resources, we do not have the necessary materials to implement these skills in our classrooms, we do not have adequate information about these skills or how to use them in our teaching context. Lack of trainings, lack of materials, lack of financial support and lack of knowledge… (Respondent 10)

4.3.3. Interpretation of the KWLA Chart

In order to support both qualitative and quantitative data and observe the ideas of the participants after the seminar which was about 21st century skills and how to implement them in our teaching context in a pedagogic way, the researcher developed a KWLA chart which includes:

- What I know about this topic? (K)
- What I want to learn from this seminar? (W)
- What I have learned after the seminar? (L)
- What action I will take as a next step? (A)

The topic of the seminar was "My Recipe… Looking at the 21st century" and it was organized with the same participants by a teacher trainer, Elna Coetzer, as a part of the study. Table 5 sums up the responses of the participants for each column.

Table 5.

Responses to the KWLA Chart

What I Know	**What I Want to Learn**	**What I Have Learned**	**What Action I Will Take**
21st century skills helps learning and teaching effectively.	I want to learn how to integrate these skills in a lesson.	I have learned to integrate these skills in my lesson.	I will prepare my lesson plans including these skills and activities.
I know about the 4Cs (communication, collaboration, creativity and critical thinking).	I want to learn how to develop professionally.	I have learned about new techniques, methods and activities to use.	I will help my learners by showing how to use these skills effectively with practice.
21st century skills prepare students for their future careers.	I want to learn more about these skills.	I have learned to be open to changes and develop continuously.	I will pay attention to integrate these skills actively in my lessons.
21st century skills teachers give importance to develop professionally.	I want to learn how to prepare my learners for the future and show them how to use these skills effectively in their lives.	I have learned how to help my learners to use these skills.	I will continue developing professionally and broaden my horizons as a 21st century skills teacher.

4.3.4. Interpretation of the Teachers' Reflection Papers about Their Lessons

As a last step of the study, the researcher asked participants to prepare a lesson plan including 4Cs (communication, collaboration, creativity and critical thinking) and reflect on their lessons in details. The participants delivered both lesson plans and the reflection papers to the researcher in order to help the researcher to visualize the flow of the lesson and analyze the data in a more realistic way. The aim of the researcher was to investigate the challenges that the teachers encountered during their lessons while implementing these skills, to understand the positive/negative sides of the lesson and to find out teachers' feelings and students' behaviors or attitudes towards the lessons. Some of the participants' reflections are:

I conducted a lesson including 4Cs and at the end of the lesson my students were happy to collaborate in order to complete the task, they used critical thinking and problem solving skills to analyze and systematize the steps during the task. When I divided them into groups and wanted them to create their own scenarios by using the target language, they all used the 4Cs in an integrated way and their satisfaction from the lesson was observable from the onset. As a teacher of the 21st century, I understand the importance of implementing these skills one more time. (Teacher 1)

...As for the student's impression, it can be pointed out that they found this activity absolutely useful and interesting. They came across a different way of learning using their own tools and new guides on how to achieve freshly-made goals and ambitions, that would contribute to create new thoughts and ways of acting when they have to make decisions within a group or team. (Teacher 9)

One of the participants highlighted the importance of using the technology in the lesson together with the 4Cs.

The aim of the lesson was introducing the adjectives and using them in writing to describe animals. They read an animal text and became familiar with the subject. They learned about the position of the adjective in a sentence and recognized the structures:''is-are''- ''have-has''. During the lesson, as far as I observed that they had fun. Students participated in activities. Apart from conducting 4Cs in my lesson, using flashcards and software made my lesson more entartaining. I was motivated by the students ' participation in the activities. (Teacher 2)

However, one of the participants claimed that because of the exam preparation of these students, conducting a lesson integrating 4Cs was difficult for that group. Teacher 5 pointed out that:

...Finally I must say that I covered 40% of my lesson according to 4Cs. As I said before this lesson was for 8th graders and they have an exam to prepare in a limited time. Developing and applying all of these 21st century skills require a lot of time and effort but these exam students do not have too much time and effort for that because of our education system but I will do my best to use more 4Cs for my 8th grade students. (Teacher 5)

4.4. Overall Findings

In order to obtain data for this study, a questionnaire, an interview, a KWLA chart and teachers' lesson plans including 4Cs and their reflection papers according to their lesson plans were used. As presented above, the findings have consistency among each other and the data gathered from both qualitative and quantitative methods were interrelated with each other. According to the findings, most of the teachers are aware of the 21st century learning and innovation skills but they need to be trained and become familiar with the pedagogical implementations of them for every level of the teaching context. It is neccessary to emphasize that professional development is required for teachers and additionally, raising awareness and the usage of the 21st century skills in the field of education needs to be supported by the MoNE. To sum up, the pedagogical implementation of the 21st century skills and teachers' perceptions on them are aligned with the teachers' actual practices and trainings.

CHAPTER V

5. DISCUSSION AND CONCLUSION

5.1. Introduction

The main purpose of this study was to investigate English language teachers' perceptions on the 21st century skills and develop their pedagogical implementations and awareness of them. For this purpose in mind, both quantitative and qualitative data gathering tools were used to obtain data. English language teachers' knowledge about the 21st century learning and innovation skills and their actual practices including these skills were examined by the researcher with several instruments. The setting of the research was a private school in Adana, Turkey. In order to conduct this study, an exploratory case study was employed by the researcher, and 105 participants were participated in the quantitative part of it while 10 participants were interviewed, asked to complete a chart about a seminar and write a reflection paper as a last step of the research. In this chapter, the findings of the research will be discussed, and further implications, suggestions and conclusions part will be presented.

Research questions:

1- What are the perceptions of EFL teachers on 21st century learning and innovation skills?
2- How do professional development activities contribute to EFL teachers' understanding of 21st century skills?

5.2. Discussion of Findings with Reference to Research Questions

- *What are the perceptions of EFL teachers on 21st century learning and innovation skills?*

The first research question was set to investigate teachers' beliefs, ideas, perceptions and knowledge about the 21st century learning and innovation skills. According to the findings of the study, the participating teachers indicated that they have the knowledge and awareness of the importance of these skills. They strongly believe that, in order to prepare learners for the future and their careers these skills are

as essential as the mastery of core subjects. They also highlighted the idea of being more successful in the academic context with the help of integrating these skills into their teaching processes. However, most of the participants admitted that they need to be trained to become more familiar with these skills and their integration to their teaching contexts. They emphasized the importance of professional development especially for this subject in order to be able to guide for their learners by teaching and showing them how and when to use these skills in their academic and career lives. Erdoğan (2019) stated that 21st century skills are fundamental essentials to success in academic and work lives, therefore they are required to be emphasized especially to prepare learners for their future. She also highlighted that if these skills are not provided to the students and they graduate without knowledge of them, they will be underprepared for current challenges and problems in society and work.

Although the mean scores of each item were high (above 4) related to teachers' knowledge and awareness of the 21st century learning and innovation skills in the quantitative part of the study, teachers highlighted the lack of experience and training to develop the knowledge and actual practices of these skills. In a similar vein, Fandiño (2013) concluded that in order to expand the horizons of the teachers and enrich pedagogical implementations of the 21st century learning and innovation skills in the classroom context, teachers need to be aware of what the 21st century requires and they need to analyze critically to understand the steps of this movement, that is the reason why professional development is a necessity for educators. Jackson and Davis (2000) emphasized the importance of professional development in this era by claiming that professional development is a key process for teachers that they can engage inside and outside of their teaching context in order to improve their knowledge, awareness and practices of these skills.

- *How do professional development activities contribute to EFL teachers' understanding of 21st century skills?*

The second research question inquired about the effects of the research with professional development activities in terms of developing awareness and implementation of 21st century learning and innovation skills in the participants' teaching context. As it is observed in the findings chapter, a seminar was organized for the participants and a KWLA chart was provided for them to complete. Afterwards, in

the light of the seminar and the previous steps of this research, they were asked to prepare a lesson plan including 21st century skills and a reflection paper. Conducting an exploratory case research in an education context has been accepted as a direct interference to improve the professional growth and development of teachers (Hensen, 1996).

Participating teachers emphasized that with the help of this study and the seminar, they became more experienced in terms of integrating these skills into their lessons. Additionally, they also highlighted that they feel more confident as they know when and how to implement these skills and how to teach their learners to use them in their academic and work lives.

Most of the participants claimed that this research opened a path for their careers in terms of understanding the importance of professional development to keep up to date with changes and become effective educators for their students. They have claimed that they were familiar with the main issues of this topic nevertheless they need more practice and training to develop the implementations of these skills. Orak (2019) concluded in her study that teachers were highly motivated to promote and develop the 21st century skills in their teaching contexts. Additionally, she also demonstrated that, when they have the support from the government and administrators in terms of organizing professional development processes and adapting the syllabuses to fill the teachers' gaps about 21st century skills, teachers are prepared to practice and increase the implementations of them in their classes.

As Bedir (2017) stated in his study "insufficient requirements from the curriculum and a strict culture of test-based assessment" prevent teachers' to develop the implementations of these skills even they have an interest and desire to integrate these skills into their teaching. The participants of the current study highlighted the same problem by indicating a lack of support from the MoNE, university entrance exams and the curriculum. It is obvious that teachers, educators and policy makers need to address the importance of the professional development and adaptations which are the requirements of this era (Guoyuan et al., 2018).

Teachers claimed that after the study they had gained a wider understanding of 21st century skills and with the help of support and training programs, they will be more successful in developing their pedagogical implementations and teaching effectively in their contexts. As a result of globalization and the changes in the world, higher education organizations are supposed to develop competent individuals, for this purpose

21st century skills are required to be promoted by teachers and placed in the curricula (Happ, 2013).

5.3. Conclusion

This research study was developed to investigate the English language teachers' perceptions on 21st century skills and their awareness and implementations of these skills, in Turkey. For the quantitative part of the study, 105 English language teachers participated in the questionnaire and for the qualitative part, ten participants (from the same private school in Adana, Turkey) were asked to take part in an interview and complete a KWLA chart with a seminar and a lesson plan including 4Cs and a reflection paper**.** The purpose of the study is to contribute to the literature in the field of English language teaching in the 21st century. Communication, collaboration, creativity and critical thinking (4Cs), digital literacy and life and career skills are essential for learners and teachers in their academic and work lives to be effective leaders, workers and citizens, therefore the MoNE (Ministry of National Education) need to give a place to these skills in the curriculum and the syllabus.

Teachers' actual practices, knowledge, beliefs, perceptions, and awareness of the 21st century skills are vital to develop well-qualified individuals for the future, that is the reason why teacher training programs and professional development sessions are required to encourage and develop enlightened and eclectic pre-service and in-service teachers of the 21st century. It is important to take into consideration that continuous professional development opens new paths to employ 21st century learning and innovation skills effectively. Teachers and teacher candidates of the 21st century should be aware of the issues of how to integrate these skills into their teaching context, when to use them according to their learners' readiness and in what ways they practice these skills and develop both awareness and implementations of them in the field of education.

5.4. Further Implications

The Findings Chapter of the study revealed that English language teachers' awareness and knowledge about the 21st century skills are mostly high, on the contrary, the practice and usage of these skills needs more developments and training in order to apply them in a proper way. This research study has an essential contribution to the

literature in the areas of developing pedagogical implementations of the 21st century skills and teachers' views and perceptions about them. Additionally, with the help of this study, the importance of the professional development for 21st century teachers and educators has been highlighted.

The current study indicated that teachers' are aware of the 21st century skills which are communication, collaboration, creativity and critical thinking (4Cs), digital literacy and life and career skills, however, they need to be informed about the common frameworks which were developed to guide teachers in terms of how and when to use these skills not only in their teaching contexts but also showing the learners how to use them in their future lives. Apart from these issues, this study also particularly implicated especially the lack of knowledge about the critical thinking skills among English language teachers. As it is shown in the findings, teachers are mostly aware of the communication, collaboration and creativity skills however they need to be trained about the skill of critical thinking. Saleh (2018) emphasized that understanding of critical thinking skills needs to be promoted by educators as a cognitive activity, additionally teachers need to develop their implementations including critical thinking skills to be more effective during the processes of teaching and learning.

The present study showed that teachers are aware of this era which is called the 21st century and they have the knowledge of these skills, nevertheless, they need to be trained and guided by the administrators and the MoNE in terms of applying professional development. As it is seen in the findings of the qualitative part of the study, teachers emphasized the lack of support by the government and the barriers of implicating these skills such as university entrance exams and the limited time that they have for the syllabus. The findings have significant implications for teachers as they show that they are open to change and are willing to adapt themselves to the requirements of the 21st century skills when they are shown a path about how to use them, when to conduct and in which ways they can apply them in a pedagogical way according to their learners. Orak (2019) also concluded her study by emphasizing the importance of professional development which can be presented through sessions about promoting and developing the awareness and usage of the 21st century skills. It is obvious that professional development in 21st century skills and teachers' awareness and pedagogical implementations of the 21st century learning and innovation skills are closely interrelated.

In the light of these implications, the current research study revealed that teachers' perceptions and pedagogical implementations and awareness of the 21st century skills are related to the quality of professional development sessions and the support of the government in terms of adapting and developing the curriculum and the syllabus.

5.5. Suggestions for Future Studies

The current research study has some suggestions for this field in terms of investigating the perceptions and views of the learners about 21st century skills and their teachers' implementations of them. Additionally, the reasons for teachers' lack of practice and their unsupported attempts to conduct these skills in their teaching contexts might be investigated. As this current study was designed as a mixed-methods exploratory case study, the same situation of this context might be analysed deeply within different and various research designs.

Apart from these, additional studies might aim to find out the effects of professional development sessions to improve teachers' knowledge, awareness and their implementations of these skills. Erdoğan (2019) suggested that in order to improve the 4Cs and their integration to the classes, reading, writing, listening and speaking skills might be investigated deeply as well as the means to conduct these skills, when to apply them and in what ways teachers promote the 21st century learning and innovation skills could be researched in future studies.

The number of participants for the qualitative part of the study was limited which may lead to different results in a wider context. That is the reason why the researcher used a variety of data collection tools to increase the reliability and the validity of the study. Therefore, in order to analyse teachers' perceptions and their pedagogical implementations of the 21st century learning and innovation skills, it is suggested that a similar research study is conducted within larger contexts including learners.

Apart from these suggestions, various and different data collection tools can be used for the future research such as lesson observations or a longitudinal studies might be employed to investigate the same issue. The observation and a longitudinal study can be utilized to analyse the real classroom atmosphere and the practices of 21st century learning and innovation skills and the results of this current study might result in a disparity between teachers' perceptions and their practices.

6. REFERENCES

Abril, J.,M.,V. (n.d.). Life College Teachers' Awareness of the 21st Century Learning Themes and Skills and Its Relation to Classroom Teaching and Induction/Training. University College:London.

Ali, Z. & Bhaskar, S. B. (2016). Basic statistical tools in research and data analysis. *Indian Journal of Anaesthesia*, 60(9), 662.

Ambrose, S., Bridges, M., Lovett, M., DiPietro, M., & Norman, M (2010). How Learning

Works: 7 Research – Based Principles for Smart Teaching. San Francisco: Jossey-Bass.

Andersen, N. (2002). New Media and New Media Literacy: The Horizon Has Become the Landscape – New Media Are Here. *Cable in the Classroom.* 30-35.

Archana, S., & Usha Rani, K. (2017). Role of a teacher in English language teaching (ELT). *International Journal of Educational Science and Research (IJESR), 7*(1), 1-4.

Austin, J. E. (2000). Principles for Partnership. *Journal of Leader to Leader, 18,*pp.44-50.

Bedir H., (2017). English Language Teachers' Beliefs on 21st Century Learning and Innovations

Skills. Çukurova International ELT Teachers' Conference (CUELT 2017): *Reshaping Teaching and Learning English for the 21st Century, ADANA, TÜRKIYE, 20-21 Nisan 2017, vol.1, no.1,* pp.60-61

Bedir, H. (2019a). Pre-service ELT teachers' beliefs and perceptions on the 21st century learning and innovation skills (4Cs). *Journal of Language and Linguistic Studies, 15*(1), 231-246.

Bedir, H. (2019b). International ELT Conferences and Professional Development. *Discourses on Culture.* University of Cukurova, Faculty of Education, ELT Department

Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., & Rumble, M. (2010). Draft White Paper 1: *Defining 21st century skills*, p.13.

Bishop, J. (2009). Partnership for 21st Century Skills.

Retrieved from: https://www.imls.gov/assets/1/AssetManager/Bishop%20Pre-Con%202.pdf

Borthwick-Duffy, S., Palmer, D., & Lane, K. (1996). One Size Doesn't Fit All: Full Inclusion and Individual Differences. *Journal of Behavioral Education, 6*(3), 311-329. Retrieved from: www.jstor.org/stable/41824134

Brookfield, S. (1997). Assessing critical thinking. *New Directions for Adult and Continuing Education, (75),* Jossey-Bass Publishers. Pp: 17-29.

Cambridge University Press, 2019. Cambridge Life Competencies Framework. *Language and Pedagogy Research.* Retrieved from: https://languageresearch.cambridge.org/clc?utm_source=wobl&utm_medium=blog&utm_content=woblcontent&utm_campaign=CLC

Canagarajah, S. (2007). Lingua franca English, multilingual communities, and language acquisition. *Modern Language Journal*, 91(1), 923-939.

Cohen, B.P. & Cohen, E.G. (1991). From groupwork among children to R & D teams: interdepence, interaction and productivity, In Lawler, E.J., Markovsky, B., Ridgeway, C. & Walker, H. (Eds.), *Advances in Group Processes (pp205-226).* Greenwich, Connecticut; USA. JAI Publishi ng.

Crystal, D. (1997). *The language that took over the world.* Cambridge University Press, Cambridge. Retrieved from: http://www.davidcrystal.com/DC_articles/English39.pdf

Day, C (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.

Dede, C. (2009). *Comparing Frameworks for "21st Century Skills".* Harvard Graduate School of Education.

Dilley, A., Fishlock, J. and Plucker, J. A. (n.d.). What we know about communication. *Part of the 4Cs Research Series:* Washington, DC: Partnership for 21st Century Learning.

Doğanay, A., & Ünal, F. (2006). Eleştirel düşünmenin öğretimi. In A. Şimşek (Ed.). *İçerik türlerine dayalı öğretim*. Nobel Yayın Dağıtım.

Dörnyei, Z. (2007a). *Research Methods in Applied Linguistics*. Oxford: Oxford University.

Dörnyei, Z. (2007b). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*. Oxford: Oxford University Press.

Dörnyei, Z. (2009). Questionnaires in Second Language Research:*Construction, Administration, and Processing.*

Dudley-Evans, T. & St. John M-J. (1998). *Developments in English for Specific Purposes,* Retrieved from: http://eltnotebook.blogspot.com/2012/01/an-elt-glossary-needs-analysis.html

Dweck, C. S. (2000). Self-theories: Their role in motivation, personality, and development. Philadelphia: Psychology Press.

Ennis. R. (2001). Goals for a critical thinking curriculum and its assessment. A. Costa (Ed.), *Developing Minds: A resource book for teaching thinking (p. 44-46).* Alexandria, VA: Association for Supervision and Curriculum Development.

Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*.

Erdoğan, V. (2019). Integrating 4C skills of 21st century into 4 language skills in EFL classes. *International Journal of Education and Research. Vol. 7 No. 11 November 2019.*

Facione, P. A. (2010). Critical thinking: What it is and why it counts. *Insight Assessment.*

Fandiño, Y. J. (2013). 21st Century Skills and the English Foreign Language Classroom: *A call for More Awareness in Colombia. GIST Education and Learning Research Journal, 7*, 190-208.

Fitriah, A. (2017). *Teachers' beliefs about creativity in EFL classrooms in Indonesian higher education. PHD Thesis submitted to the Faculty of Arts and Design Discipline of TESOL University of Canberra* Retrived from: http://www.canberra.edu.au/researchrepository/file/8180337d-a95a-428c-aa17-4848ae8a08ac/1/full_text.pdf

Franklin, J., & Kariuki, C. (2009). Professional Development for 21 Century Teachers: Effective Classroom Management. Jackson State University.

Gallego, F. M. D. (2012, February 12). *Experiences of a teacher of English. [Web log post]*. Retrieved from: http://fernandoexperiences.blogspot.com.tr/2012/02/792-english- asbridge-of-communication.html

Garcia, C., J. (2012). Professional Development in the 21st Century – Nine Structures for Coaching and Mentoring. *IDRA Newsletter*. Retrieved from:https://www.idra.org/resource-center/professional-development-in-the-21st-century-2/

García-Herreros Machado, C. A. (2017). The Road to Bilingualism: Cases of Success. *Latin American Journal of Content and Language Integrated Learning, 10*(2), 297-307.

Gardner, H. (2008). *Five Minds For The Future*. Boston, MA: Harvard Business Press.

Gass, S. & Selinker L. (2001). *Second Language Acquisition: An Introductory Course.* Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Gibson, S. & Brooks, C. (2013). Rethinking 21st Century Professional Development. *Literacy Information and Computer Education Journal*. pp. 1064-1074.

Gilroy, A. (2015). When 21st Century Skills Meet English Language Skills. Zayed University. Academic Bridge Program, Dubai.

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

Glossary of Education Reform (2016, August 25). 21st century skills. Retrieved November 3, 2018 online from https://www.edglossary.org/21st-century-skills/.

Goo, S. K. (2015). The skills Americans say kids need to succeed in life. Retrieved from: http://www.pewresearch.org/fact-tank/2015/02/19/skills-for-success/ on September 27, 2018.

Gorman, M. (2019). Collaboration: Facilitating and Assessing 21st Century Skills in Education. *21st Century Educational Technology and Learning.* Retrieved from: https://21centuryedtech.wordpress.com/2019/11/08/collaboration-facilitating-andassessing-the-21st-century-skills-in-education/

Gönenç, E. Ö. (2007). İletişimin tarihsel süreci. *İstanbul Üniversitesi İletişim Fakültesi Dergisi. Istanbul University Faculty of Communication Journal*, (28).

Grek, S. 2009. Governing by numbers: The PISA 'effect' in Europe. Journal of Education Policy 24, no. 1: 23–37.

Grosser, M. M., & Lombard, B. J. J. (2008). The relationships between culture and the development of critical thinking abilities of prospective teachers. *Teaching and Teacher Education, 24,* 1364–1375.

Guoyuan, S., Liang, J., Chai, C., Dong, Y., & Tsai, C. (2018). Teachers' actual and preferred perceptions of twenty-first century learning competencies: a Chinese perspective. *Asia Pacific Education Review*. 19. 10.1007/s12564-018-9522-0.

Gur, B. & Çelik, Z. & Özoğlu, M. (2012). Policy options for Turkey: a critique of the interpretation and utilization of PISA results in Turkey. *Journal of Education Policy*. 27. 1-21. 10.1080/02680939.2011.595509.

Happ, D. W. (2013*). Results of a survey of 21st century skills of communication, collaboration, critical thinking, and creativity* (Doctoral dissertation). American International College, U.S

Hensen, K.T. (1996). Teachers as researchers. In J. Sikula (Ed.), Handbook of research on teacher education (4th ed., pp. 53-66). New York: Macmillan Library Reference USA.

Hiep,P.H. (2001). Teacher Development: A real need for English departments in Vietnem. *English Teaching Forum*, 39(4), 30-33.

İlhan, A. Ç. (2004). 21. yüzyılda öğretmen yeterlikleri. *Bilim ve Aklın Aydınlığında Eğitim Dergisi*, 58, 40-45.

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field methods*, *18*(1), 3-20.

Jackson, A. W. & Davis, G. A. (2000). Turning points 2000: Educating adolescents in the 21st century. New York: Teachers College Press.

Jenkins, H., Clinton, K., Purushotma, R., Robinson, A. J., & Weigel, M. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Chicago, IL: The MacArthur Foundation.

Johnson, R. T. & Johnson, D. W. (1985). Relationships Between Black and White Students in

Intergroup Cooperation and Competition. *Journal of Social Psychology. 125(4),* pp. 421-428.

Jordan, J. (2019). *Three Benefits of Reflective Teaching and How to Practice it in Your Classroom.* Retrieved from: https://plsclasses.com/three-benefits-of-reflective-teaching

Kabir, S., M. (2016). *Methods of Data Collection*.

Kaplan, D. (2019). Creativity in Education: Teaching for Creativity Development. *Psychology*. *10*. 140-147. 10.4236/psych.2019.102012.

Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What Knowledge Is Of Most Worth: Teacher knowledge for 21st century learning. *Journal of digital learning in teacher education*, *29*(4), 127-140.

Kivunja, C. (2015). Exploring the pedagogical meaning and implications of the 4Cs "Super Skills" for the 21st century through Bruner's 5E lenses of knowledge construction to improve pedagogies of the new learning paradigm. *Creative Education, 6, 224-239. DOI: 10.4236/ce.2015.62021*.

King, M. M. (2012). *Twenty first century teaching and learning: Are teachers prepared?. (Doctoral dissertation).* College of Saint Elizabeth, U.S.

Koehler, M. J., Mishra, P., Bouck, E. C., DeSchryver, M., Kereluik, K., Shin, T. S., & Wolf, L. G. (2011). Deep-play: Developing TPACK for 21st century teachers. *International Journal of Learning Technology, 6*(2), 146-163.

Lemke, C. (2002). enGauge 21st Century Skills: *Digital Literacies for a Digital Age*.

Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives?. *Thinking Skills and Creativity, 22*, 273-288.

Maley, A., & Bolitho, R. (2015) Creativity. *ELT Journal*, Volume 69, Issue 4, October 2015, Pages 434–436. Retrieved from: https://doi.org/10.1093/elt/ccv036

Magner, T., Saltrick, S., & Wesolowski, K. (2011). *21st Century Skills Map. [Web log post]*. Retrieved from: https://www.actfl.org/sites/default/files/pdfs/21stCenturySkillsMap

Marjan, L., Mozghan, L., & Zhina, Kermanshahi. (2012). 21st Century Learning; Learning in Collaboration. *Procedia - Social and Behavioral Sciences.* 47. 1696-1701. 10.1016/ j.sbspro.2012.06.885.

McKenna, J. M. (2015). *The Development of 21st Century Skills Among Incarcerated Youth: A Needs Assessment of Teachers.* (Dissertation thesis). University of Southern California, U.S.

McMahon, J. and Crump, P. (2011). Preparing Learners for the 21st Century [Webinar]. Retrieved from: https://www.cambridgeenglish.org/teaching-english/resourcesfor- teachers/webinars/general/preparing-learners-for-the-21st-century/13-and-15- june2016/.

Miller, S. (2016). *Implementation of the 4Cs of 21 st Century Learning Skills within the Blended Coaching Model (Doctoral dissertation)*. Brandman University, U.S.

Nazikian, F., & Park, J. (2016). How to Develop" 21 st Century Skills" in Foreign Language Education. *Japanese Language and Literature*, 347-373

Nishanthi, R. (2018). Importance of learning English in today world. *International Journal of Trend in Scientific Research and Development*, 3(1).

OECD. (2007). PISA 2006 Science Competencies For Tomorrow's World: Volume 1 Analysis.Paris: *OECD.*

OECD (2009a). 21st century skills and competences for new millennium learners in OECD countries.

OECD. (2009b). Creating Effective Teaching and Learning Environments: First Results from TALIS. *The Professional Development of Teachers.* p.49.

OECD. (2012). Preparing teachers and developing school leaders for the 21st century– LESSONS FROM AROUND THE WORLD.

OnSide Learning (2014). Education-Collaboration [Video]. *Teaching in the 21st Century Series*. Available at https://www.youtube.com/watch?v=Po40I4c94R0.

Orak, S. D. (2019). *Teachers' awareness and actual practices of 21st century learning and innovation skills* (Master's thesis, Çağ Üniversitesi Sosyal Bilimler Enstitüsü).

Osman, B. H. A., & Basar, M. N. (2016). Amalan Pengajaran dan Pembelajaran Abad Ke-21 Dalam

Kalangan Pensyarah Institut Pendidikan Guru Kampus Ipoh. *Jurnal Penyelidikan Dedikasi, 10.*

P21. Partnership for 21st Century Skills. (2009a). Framework for 21st century learning. Retrieved November, 20, 2016, from http:// www.p21.org.

P21. Partnership for 21st Century Skills. (2009b). P21 framework definitions. Retrieved from:http://www.p21.org/documents/P21_Framework_Definitions.pdf

P21. Partnership for 21st Century Skills (2011a) "Communication and Collaboration." Retrieved from: http://www.p21.org/index.php?option=com_contenttask=view&id=261&Itemid=120.

P21. (2011). Partnership for 21st Century Skills (P21). Framework for 21st Century Learning. Retrieved from: http://www.P21.org on July 10, 2014

P21. Partnership for 21st Century Skills. (2017). Skills for today research series 2017. Retrieved from: http://www.p21.org/component/content/article/36-general/2291-skillsfortodays - communication

Patton, M. (2002). *Qualitative research and evaluation methods, 3rd Ed*. Thousand Oaks: Sage.

Paul, R. & Elder. L.(2009). *The Miniature Guide to Critical Thinking Concepts and Tools*, 5th Ed. Foundation for Critical Thinking, Dillon Beach, CA

Petek, E., & Bedir, H. (2018). An adaptable teacher education framework for critical thinking in language teaching. *Thinking Skills and Creativity*, *28*, 56-72.

Piirto J. (2011) Creativity for 21st Century Skills. *In: Creativity for 21st Century Skills*. SensePublishers.

Pink, D. H. (2005). A Whole New Mind: *Moving From The Information Age To The Conceptual Age.* New York: Riverhead Books.

Price, J., H. & Murnan, J. (2004). Research Limitations and the Necessity of Reporting Them. *American Journal of Health Education* 35, 66-67.

Promethean. 2017. Digital literacy in the classroom. How important is it? Retrieved from: https://resourced.prometheanworld.com/digital-literacy-classroom-important/

Rautalin, M. & Alasuutari.P., 2009. The uses of the national PISA results by Finnish officials in central government. Journal of Education Policy 24, no. 5: 539–56.

Rayford, C. R. (2010). Reflective practice: The teacher in the mirror. Las Vegas.

Resnick, L.B. (1987). *Education and Learning To Think (p.20).* Washington, DC, USA. National Academy Publishing.

Rich, E. (2010). How Do You Define 21st Century Learning? – One question. Eleven Answers. *Education Week Teacher PD Sourcebook.* Retrieved from:https://www.edweek.org/tsb/articles/2010/10/12/01panel.h04.html

Robinson, K. (2011). Ken Robinson Says Schools Kill Creativity Speech. *TED Talks.* Retrieved from : http://www.ted.com/talks/ken_robinson_says_ schools_kill_creativity.html.

Ross, D. (2017). Empowering our students with 21st century skills for today. *Getting Smart.*

Retrieved from: https://www.gettingsmart.com/2017/04/empowering-students-21st-century-skills/

Rotherham, A. J., & Willingham, D. T. (2010). 21st-Century" skills. *American Educator*, *17*(1), 17-20.

Rusdin, N. M. (2018). Teachers' Readiness in Implementing 21st Century Learning. *International Journal of Academic Research in Business and Social Sciences*, *8*(4), 1293-1306

Saavedra, Anna Rosefsky and V. Darlyn Opfer. (2012). Teaching and Learning 21st century Skills: *Lessons from the Learning Sciences*. The RAND Corporation.

Saleh, S. (2018). Critical Thinking as a 21-Century Skill: Conceptions, Implementation and Challenges in the EFL Classroom.

Saleh, S., E. (2019). 4Cs in the EFL Classroom. 4. 57-80.

Sang, G., Liang, J., Chai, C., Dong, Y., & Tsai, C. (2018). Teachers' actual and preferred perceptions of twenty-first century learning competencies: a Chinese perspective. *Asia Pacific Education Review*, *19*(3), 307-317. doi: 10.1007/s12564-018-9522-0

Saunders, M., Lewis, P., & Thornhill, A. (2012). Research Methods for Business Students, 6th edn, sn.

Scardamalia, M., Bransford, J., Kozma, B., & Quellmalz, E. (2010). Assessment and Teaching of 21st Century Skills. *Assessment and Teaching of 21st Century Skills*. 10.1007/97894-007-2324-5_5.

Silva, E. (2009). Measuring skills for 21st-century learning. *Phi Delta Kappan, 90(9),* 630-634.

Slavin, R. E. (1980). Cooperative learning. *Journal of Review of Educational Research. 50 (2),* pp. 315-342.

Stemler, S. (2001). An overview of content analysis, *Practical Assessment, Research & Evaluation, 7. 137-146.*

Sternberg, R. (2007). *Wisdom, Intelligence, and Creativity Synthesized*. Cambridge: Cambridge UP.

Taylor, F. (2009). Authentic internet in the EFL class. *Modern English Teacher, 18*(1), 5-9.

Tekin, T. (2016). *Communication in educational institutes; Metaphoric analysis at primary level.* (Master's Thesis, Avrasya Üniversitesi Sosyal Bilimler Enstitüsü).

Trilling, B., & Fadel, C. (2012). *21st century skills: Learning for life in our times*. John Wiley & Sons.

Wang, W. (2016). Chinese English in as Lingua Franca in Global Business Setting. *Web of Conferences:25*

Wagner, T. (2008). Rigor redefined. Educational Leadership, 66(2), 20–24.

Wagner, T. (2010). Even our "best" schools are failing to prepare students for 21st century careers and citizenship. *Educational Leadership*, 66(2), 20-25.

Webb, N.M. (1980). An analysis of group interaction and mathematical errors in heterogeneous ability groups. *British Journal of Educational Psychology. 50 (3),* pp.266-276.

Weheba, D. & Kedar, M. (2007). The Impact of Communication in Teaching: A Two-way Communication Approach. *MPRA Paper.*

World Bank.(2011). Learning for All. Investing in People's Knowledge and Skills to Promote Development. World Bank Group Education Strategy 2020. Washington DC: World Bank.

Vandenberghe, R. (1984). Teacher's Role in educational change, *Journal of In-Service Education, 11:1,* 14-25, DOI: 10.1080/0305763840110103

Yeni, G. (2018). *The Effect of 21st Century Skills Training on Foreign Language Teachers' Perceptions Regarding Their Educational Technology and Materials Development Competencies*. (Master's Thesis, İstanbul Üniversitesi Eğitim Bilimleri Enstitüsü).

Zainal, Z. (2007). Case study as a research method. Jurnal Kemanusiaan, (9), 1-6.

Zivkovic, S. (2016). A model of critical thinking as an important attribute for success in the 21st century. *Procedia-Social and Behavioral Sciences, 232*, 102-108.

7. APPENDIX

Appendix 1. Ethics Committee Approval Document

T.C	
ÇAĞ ÜNİVERSİTESİ	
SOSYAL BİLİMLER ENSTİTÜSÜ	
TEZ / ARAŞTIRMA / ANKET / ÇALIŞMA İZNİ / ETİK KURULU İZİNİ TALEP FORMU VE ONAY TUTANAK FORMU	
ÖĞRENCİ BİLGİLERİ	
T.C. NOSU	**50143184006**
ADI VE SOYADI	ECEM EKER
ÖĞRENCİ NO	20188008
TEL. NO.	0533 093 76 42
E - MAİL ADRESLERİ	ecemeker.1995@gmail.com
ANA BİLİM DALI	İNGİLİZ DİLİ EĞİTİMİ ANA BİLİM DALI
HANGİ AŞAMADA OLDUĞU (DERS / TEZ)	TEZ
İSTEKDE BULUNDUĞU DÖNEME AİT DÖNEMLİK KAYDININ YAPILIP-YAPILMADIĞI	2019 / 2020 - GÜZ DÖNEMİ KAYDINI YENİLEDİM.
ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ BİLGİLER	
TEZİN KONUSU	PEDAGOGICAL IMPLEMENTATIONS OF THE 21ST CENTURY SKILLS: AN ACTION RESEARCH FOR EFL TEACHERS
TEZİN AMACI	İngilizce Öğretmenlerinin 21. Yüzyıl Becerilerini ve Sınıf İçi Pedagojik Uygulamalarını Geliştirmek
TEZİN TÜRKÇE ÖZETİ	Bu projenin amacı, öğretmenlerin 21. Yüzyıl yöntem teknik ve becerilerinin farkındalığını arttırmakla beraber onları sınıf içi pedagojik uygulamalarında da kullanmaya teşvik etmek ve aynı zamanda öğretmenlerin kişisel ve mesleki gelişimlerine katkı sağlamaktır.
ARAŞTIRMA YAPILACAK OLAN SEKTÖRLER/ KURUMLARIN ADLARI	ÖZEL ERAL OKULLARI / ADANA

Sobe 1900

İZİN ALINACAK OLAN KURUMA AİT BİLGİLER	ADANA ÇUKUROVA MİLLİ EĞİTİM MÜDÜRLÜĞÜ ÖZEL ERAL OKULLARI
YAPILMAK İSTENEN ÇALIŞMANIN İZİN ALINMAK İSTENEN KURUMA AİT AYRINTILI BİLGİLER	Özel ERAL Okulları'nda anaokulu-ilkokul-ortaokul ve lise bölümünde İngilizce derslerine aktif olarak giren İngilizce öğretmenleriyle beraber sürdürülecek çalışmada, İngilizce Öğretmenlerinin 21. Yüzyıl becerilerinin algılarını, farkındalığını ve sınıf içi uygulamalarını ölçmek amacıyla, çalışmada yer alacak olan öğretmenlerimizin konu ile ilgili bir anket doldurması, ve ardından bir röportaj gerçekleştirilmesi, ardından bir seminer-eğitim düzenlenmesi, daha sonra derslerini betimleyen bir anlatım metni hazırlamaları ve birer geri dönüt mektubu yazılması rica edilecektir.
UYGULANACAK OLAN ÇALIŞMAYA AİT ANKETLERİN/ ÖLÇEKLERİN BAŞLIKLARI/ HANGİ ANKETLERİN - ÖLÇELERİN UYGULANACAĞI	SURVEY QUESTIONNAIRE OF THE IMPLEMENTATION OF 4Cs – 5 POINT LIKERT SCALE 4C UYGULAMANIN ANKETİ – 5 PUANLI LIKERT ÖLÇEĞİ AWARENESS AND PEDAGOGICAL IMPLEMENTATION OF THE 21ST CENTURY SKILLS INTERVIEW 21. YÜZYIL BECERİLERİ FARKINDALIĞI VE PEDAGOJİK UYGULAMASI ÜZERİNE RÖPORTAJ
EKLER	1) 4C UYGULAMANIN ANKETİ – 4 SAYFA 2) RÖPORTAJ – 10 SORU
ÖĞRENCİNİN ADI - SOYADI: ECEM EKER	**ÖĞRENCİNİN İMZASI:** Enstitü Müdürlüğünde evrak aslı imzalıdır. **TARİH: 21/11/2019**
TEZ/ ARAŞTIRMA/ANKET/ÇALIŞMA TALEBİ İLE İLGİLİ DEĞERLENDİRME SONUCU	
1. Seçilen konu Bilim ve İş Dünyasına katkı sağlayabilecektir.	
2. Anılan konu İngiliz Dili Eğitimi Ana Bilim Dalı faaliyet alanı içerisine girmektedir.	

Sobe 1900

1.TEZ DANIŞMANININ ONAYI	2.TEZ DANIŞMANININ ONAYI (VARSA)	SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRÜNÜN ONAYI	A.B.D. BAŞKANININ ONAYI
Adı - Soyadı: HASAN BEDİR	Adı - Soyadı: ……..…	Adı - Soyadı: Murat Koç	Adı - Soyadı: Şehnaz Şahinkarakaş
Unvanı : DOÇ. DR.	Unvanı: ……..…	Unvanı: ...……	Unvanı: ……
İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası: ……..…	İmzası: Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası: Enstitü Müdürlüğünde evrak aslı imzalıdır.
21 / 11/ 2019	…. / .... / 20....	21/11 / 2019	21 /11 / 2019

ETİK KURULU ASIL ÜYELERİNE AİT BİLGİLER				
Adı - Soyadı: **Mustafa BAŞARAN**	Adı - Soyadı: **Yücel ERTEKİN**	Adı - Soyadı: **Deniz Aynur GÜLER**	Adı - Soyadı: **Ali Engin OBA**	Adı - Soyadı: **Mustafa Tevfik ODMAN**
Unvanı : Prof. Dr.	Unvanı : Prof. Dr.	Unvanı: Prof. Dr.	Unvanı :Prof. Dr.	Unvanı: Prof. Dr.
İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : Enstitü Müdürlüğünde evrak aslı imzalıdır.	İmzası : …….	İmzası : ……
21 / 11/ 2019	21 / 11/ 2019	21 / 11/ 2019	21 / 11/ 2019	21 / 11/ 2019
Etik Kurulu Jüri Başkanı - Asıl Üye	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**	**Etik Kurulu Jüri Asıl Üyesi**

OY BİRLİĞİ İLE		**Çalışma yapılacak olan tez için uygulayacak olduğu Anketleri/Formları/Ölçekleri Çağ Üniversitesi Etik Kurulu Asıl Jüri Üyelerince İncelenmiş olup,** 21 / 11/ 2019- 10/ 01 / 2020 **tarihleri arasında uygulanmak üzere gerekli iznin verilmesi taraflarımızca uygundur.**
OY ÇOKLUĞU İLE	x	

AÇIKLAMA: BU FORM ÖĞRENCİLER TARAFINDAN HAZIRLANDIKTAN SONRA ENSTİTÜ MÜDÜRÜNE ONAYLATILARAK ENSTİTÜ SEKRETERLİĞİNE TESLİM EDİLECEKTİR. AYRICA YAZININ PUNTOSU İSE 12 (ON İKİ) PUNTO OLACAK ŞEKİLDE YAZILARAK ÇIKTI ALINACAKTIR.

Appendix 2. Survey Questionnaire of the Implementation of 4Cs

Please rate to what extend you are ready for the implementation of 4Cs in your teaching by placing a CROSS (X) in the appropriate box.

	Always true of me	Usually true of me	Somewhat true of me	Usually not true of me	Never true of me
COMMUNICATION AND COLLABORATION					
Communicate Clearly					
1. I can articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.					
2. I listen effectively to decipher meaning, including knowledge, value, attitudes and intentions.					
3. I can use communication for a range of purposes (e.g. to inform, instruct, motivate and persuade).					
4. I can utilize multiple media and technologies, and know how to judge their effectiveness a priori as well as assess their impact.					
5. I can communicate effectively in diverse environments (including individual learner differences.					
Collaborate with Others					
6. I can demonstrate ability to work effectively and respectfully with diverse teams.					
7. I can exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal.					
8. I can share responsibility for collaborative work without dominating.					
9. Use social skills in order to avoid conflict and maintain happiness.					
Think Interdependently					
10. I am aware that a group can accomplish more than an individual					
11. I am sensitive to the needs of my peers and do what I can to help them.					
12. I listen to and strongly consider the ideas of others.					
13. I value the individual contributions made by each team member.					
CREATIVITY AND INNOVATION **Think Creatively**					
14. I use a wide range of idea creation techniques (such as brainstorming, KWL chart, etc.).					
15. I can create new and worthwhile ideas.					
16. I can elaborate, refine, analyse and evaluate my own ideas in order to improve and maximize creative efforts.					

	Always true of me	Usually true of me	Somewhat true of me	Usually not true of me	Never true of me
17. I can develop creative solutions to problems after examining alternative possibilities from many angles.					
Work Creatively with Others					
18. I can develop, implement and communicate new ideas to others effectively.					
19. I am open and responsive to new and diverse perspectives.					
20. I incorporate group input and feedback into the work.					
21. I can demonstrate originality and inventiveness in work and understand the real world limits to adopting new ideas.					
Apply Past Knowledge to New Situations					
22. I can make connections by referring to past experiences.					
23. I draw from experience when confronted with new and perplexing problems.					
24. I can abstract meaning from one experience, carry it forth, and apply it in a new and novel situation.					
25. I can recognize similarities between my past experiences and current challenges and draw from what I learned					
CRITICAL THINKING AND PROBLEM SOLVING **Think Critically**					
26. I can use various types of reasoning (inductive, deductive, etc.) as appropriate to the situation.					
27. I can analyse how parts of a whole interact with each other to produce overall outcomes in complex systems.					
Make Judgments and Decisions					
28. I can effectively analyse and evaluate evidence, arguments, claims and beliefs and alternative points of view.					
29. I can interpret information and draw conclusions based on the best analysis.					
Ask Questions					
30. I can ask questions to fill in the gaps between what is known and what is unknown					

31. I can ask questions at all levels of Bloom's Taxonomy of Thinking, but match the purpose with the correct type of question.					
	Always true of me	**Usually true of me**	**Somewhat true of me**	**Usually not true of me**	**Never true of me**
Solve Problems					
32. I can solve different kinds of non-familiar problems in both conventional and innovative ways.					
33. I can Identify and ask significant questions that clarify various points of view and lead to better solutions					
REFLECTION AND AWARENESS **Metacognition (Thinking About Our Thinking)**					
34. I know what I know and know what I do not know.					
35. I am conscious of the steps and strategies during the act of problem solving					
36. I develop a plan of action, maintain that plan in mind over a period of time, then reflect back on and evaluate the plan upon its completion.					
37. I shift gears if my plan is not working.					
38. I can eexplain my thinking and the strategies used while making decisions.					
Reflect and Synthesize					
39. I reflect critically on my learning experiences and processes.					
40. I synthesize and make connections between information and arguments.					

1. When you are practising teaching English, please indicate the level of ***emphasis*** on each of the following 21st learning and innovation skills.

	Strong emphasis	***Moderate emphasis***	***Little emphasis***	***No emphasis***
Critical thinking				
Creativity and Innovation				
Problem Solving				
Communication				
Collaboration				

1. Do you think these skills are effective in language learning/teaching? Please explain briefly.

2. Describe a specific activity or strategy used in your classroom that addresses these skills.

3. Describe your confidence in teaching these skills after you completed your teacher preparation program.

4. What could be the underlying rationale that led to the introduction of these skills into curriculum?

5. Please provide us with any additional comments you may have about 21st learning and innovation skills.

THANK YOU VERY MUCH FOR YOUR CONTRIBUTION

Appendix 3. Interview Questions

1 – What do 21st century skills in teaching English mean to you?

2- What are your expectations from providing students with 21st century skills?

3- Do you use any activities to present 21st century skills?

4- What does "a 21st century skills teacher" mean to you?

5- What can you say about the implementation/classroom practices of 21st century skills in your school?

6- What could be the advantages of being aware of 21st century skills in daily life?

7- What could be the advantages of practicing 21st century skills in our classes?

8- Do you think your administrators and the MoNE supports the developing the awareness of 21st century skills and the usage of these skills?

9- How can we develop the awareness and the level of usage of 21st century skills in our teaching context?

10- What are barriers of the implementations of 21st century skills?

Appendix 4. Consent Form

Consent Form

Cag University / Social Sciences Faculty / English Language Teaching Department

Master's Degree Programme

Project/Thesis: Exploring EFL Teachers' Perceptions on 21st Century Skills: A Case Study

Responsible Researcher/Supervisor: Ecem Eker

Name of Participant: _____

1. I consent to participate in this project, the details of which have been explained to me, and I have been provided with a written plain language statement to keep.
2. I understand that the purpose of this research is to investigate English Language teachers' perceptions, awareness and implementations of 21st century skills in their classrooms.
3. I understand that my participation in this project is for research purposes only.
4. I acknowledge that the possible effects of participating in this research project have been explained to my satisfaction.
5. In this project I will be required to answer the interview questions, the questionnaire and survey. I also will be required to be observed by the researcher and reflect on the study as a teacher reflection at the end of the research.
6. I understand that my interviews may be audio and/or video-taped.
7. I understand that my participation is voluntary and that I am free to withdraw from this project anytime without explanation or prejudice and to withdraw any unprocessed data that I have provided.
8. I have been informed that the confidentiality of the information I provide will be safeguarded subject to any legal requirements; my data will be password protected and accessible only by the named researchers.
9. I understand that given the small number of participants involved in the study, it may not be possible to guarantee my anonymity.
10. I understand that after I sign and return this consent form, it will be retained by the researcher.

Participant Signature: _____ **Date:** _____

Appendix 5. KWLA Chart

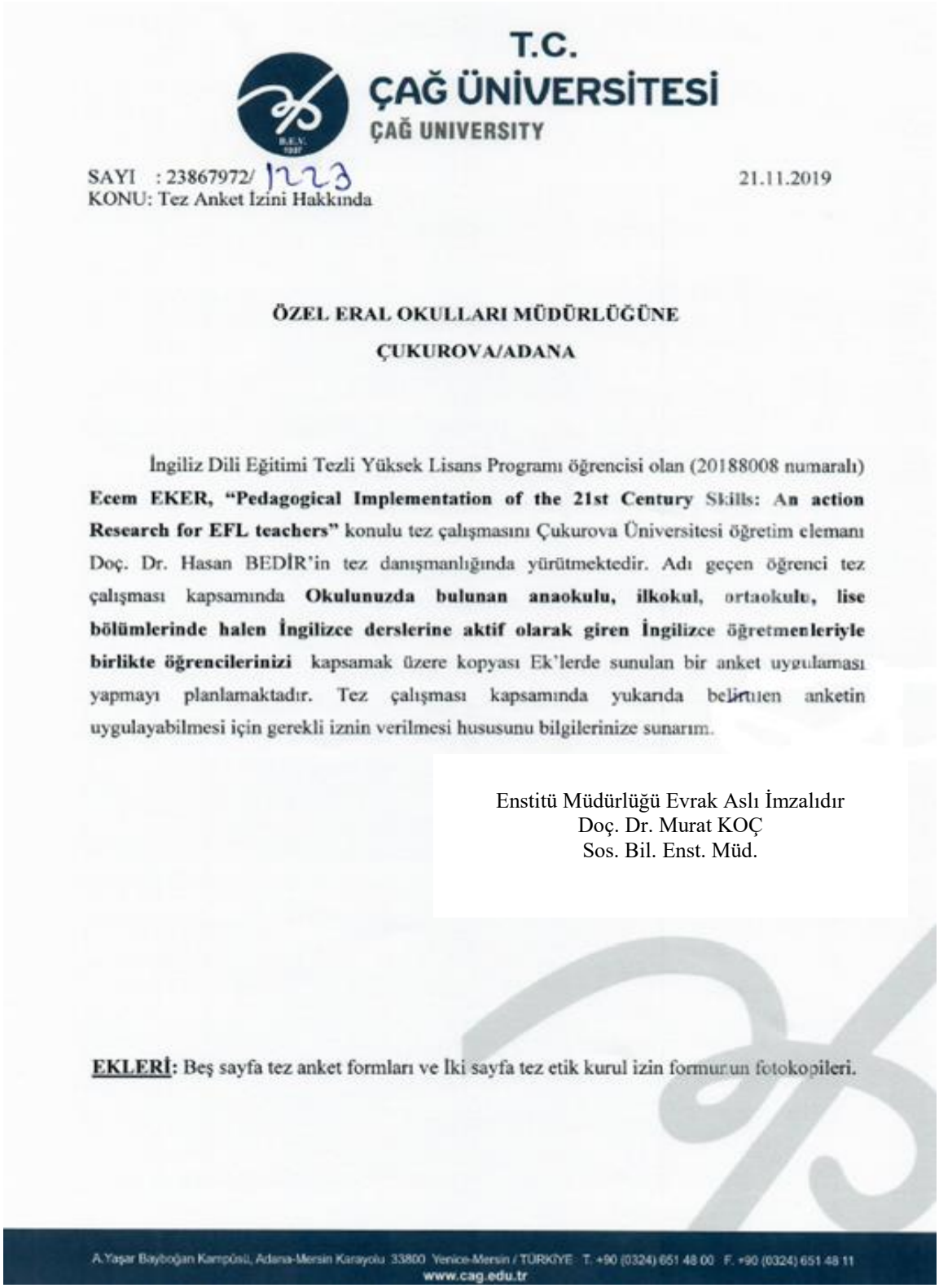
Dear Participants,

This KWLA CHART is provided by the researcher for you to take key notes during the seminar section which is about 21st century skills. I kindly request to fill every column according to your own ideas and thoughts.

Thanks for your support and attention.

WHAT I KNOW ABOUT THIS TOPIC?	WHAT I WANT TO LEARN FROM THIS SEMINAR?	WHAT I HAVE LEARNED AFTER THE SEMINAR?	WHAT ACTION I WILL TAKE?

Appendix 6. Administrative Consent Form



T.C.
ÇAĞ ÜNİVERSİTESİ
ÇAĞ UNIVERSITY

SAYI : 23867972/ 1223 21.11.2019
KONU: Tez Anket İzini Hakkında

ÖZEL ERAL OKULLARI MÜDÜRLÜĞÜNE
ÇUKUROVA/ADANA

İngiliz Dili Eğitimi Tezli Yüksek Lisans Programı öğrencisi olan (20188008 numaralı) **Ecem EKER, "Pedagogical Implementation of the 21st Century Skills: An action Research for EFL teachers"** konulu tez çalışmasını Çukurova Üniversitesi öğretim elemanı Doç. Dr. Hasan BEDİR'in tez danışmanlığında yürütmektedir. Adı geçen öğrenci tez çalışması kapsamında **Okulunuzda bulunan anaokulu, ilkokul, ortaokulu, lise bölümlerinde halen İngilizce derslerine aktif olarak giren İngilizce öğretmenleriyle birlikte öğrencilerinizi** kapsamak üzere kopyası Ek'lerde sunulan bir anket uygulaması yapmayı planlamaktadır. Tez çalışması kapsamında yukarıda belirtilen anketin uygulayabilmesi için gerekli iznin verilmesi hususunu bilgilerinize sunarım.

Enstitü Müdürlüğü Evrak Aslı İmzalıdır
Doç. Dr. Murat KOÇ
Sos. Bil. Enst. Müd.

EKLERİ: Beş sayfa tez anket formları ve İki sayfa tez etik kurul izin formunun fotokopileri.

A.Yaşar Bayboğan Kampüsü, Adana-Mersin Karayolu 33800 Yenice-Mersin / TÜRKİYE T. +90 (0324) 651 48 00 F. +90 (0324) 651 48 11
www.cag.edu.tr

ERAL OKULLARI

T.C.
ÇUKUROVA KAYMAKAMLIĞI
Özel Eral İlkokul Müdürlüğü
99975501

Konu: Tez Anket İzni hk.

25.11.2019

Çağ Üniversitesi

Yenice / MERSİN

Okulumuz İngilizce öğretmenlerinden Ecem EKER'in tez anket çalışması ile ilgili olarak okulumuzda halen İngilizce derslerine aktif olarak giren İngilizce Öğretmenleri ile birlikte kopyası eklerde sunulan anket ve röportaj uygulamalarını yapması tarafımızca uygun görülmüştür.

Gereğinin yapılmasını rica ederiz.

Caner COŞKUNTUNCEL
Okul Müdürü

T.C. MİLLÎ EĞİTİM BAKANLIĞI
ADANA ÖZEL ERAL İLKOKULU

Güzelyalı Mah. 81107 Sk. No:3/101170 Çukurova Adana, Türkiye
Tel: +90 322 234 0201 / +90 322 232 0372
Gsm: +90 507167 3311 / E-Posta: info@eral.k12.tr

8. CURRICULUM VITAE

PERSONAL DETAILS

Name-Surname : Ecem EKER

Date of Birth : 09.08.1995

Place of Birth : MERSİN

Contact Information: E-mail : ecemeker.1995@gmail.com

EDUCATION

2018-2020: Çağ University, Institute of Social Sciences, Department of English Language Teaching, Mersin. (MA)

2013-2017: Cukurova University, Institute of Social Sciences, Department of English Language Teaching, Adana. (BA)

PROFESSIONAL EXPERIENCES

2017-2020 : English Language Teacher, ERAL COLLEGE, Adana, Turkey.