

**REPUBLIC OF TURKEY
CUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT**

**AN EXPLORATION OF ENGLISH AS A FOREIGN LANGUAGE (EFL)
TEACHERS' PERCEPTIONS ON 21ST CENTURY LEARNING AND
INNOVATION SKILLS**

Hacer KAÇAR

MASTER OF ARTS

ADANA / 2020

**REPUBLIC OF TURKEY
CUKUROVA UNIVERSITY
INSTITUTE OF SOCIAL SCIENCES
ENGLISH LANGUAGE TEACHING DEPARTMENT**

**AN EXPLORATION OF ENGLISH AS A FOREIGN LANGUAGE (EFL)
TEACHERS' PERCEPTIONS ON 21ST CENTURY LEARNING AND
INNOVATION SKILLS**

Hacer KAÇAR

**Supervisor : Prof. Dr. Hasan BEDİR
Member of Examining Committee : Prof. Dr. Şehnaz ŞAHİNKARAKAŞ
Member of Examining Committee : Assoc. Prof. Dr. Yasemin DARANCIK**

MASTER OF ARTS

ADANA / 2020

ETİK BEYANI

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Kurallarına uygun olarak hazırladığım bu tez çalışmada;

- Tez içinde sunduğum verileri, bilgileri ve dokümanları akademik ve etik kurallar çerçevesinde elde ettiğimi,
- Tüm bilgi, belge, değerlendirme ve sonuçları bilimsel etik ve ahlak kurallarına uygun olarak sunduğumu,
- Tez çalışmada yararlandığım eserlerin tümüne uygun atıfta bulunarak kaynak gösterdiğimi,
- Kullanılan verilerde ve ortaya çıkan sonuçlarda herhangi bir değişiklik yapmadığımı,
- Bu tezde sunduğum çalışmanın özgün olduğunu,
bildirir, aksi bir durumda aleyhime doğabilecek tüm hak kayıplarını kabullendiğimi beyan ederim. 30 / 06 / 2020.

Hacer KAÇAR

ÖZET

İNGİLİZCEYİ YABANCI DİL OLARAK ÖĞRETEN ÖĞRETMENLERİN 21. YÜZYIL ÖĞRENME VE YENİLİK BECERİLERİ HAKKINDAKİ ALGILARININ BİR İNCELEMESİ

Hacer KAÇAR

Yüksek Lisans Tezi, İngiliz Dili Eğitimi Ana Bilim Dalı

Danışman: Prof. Dr. Hasan BEDİR

Haziran 2020, 107 Sayfa

21. yüzyıldaki eğitim, küreselleşmenin artan etkisini ve günümüz bilgi toplumunda okuryazarlık konusunda eğitim yaklaşımlarının etkin kullanımı ile bilgi ve iletişim teknolojisinin rolünü destekleme ihtiyacının artan bir farkındalığını vurgulamaktadır. Özellikle yenilik becerileri, öğrencileri sadece kendi lokasyonlarında, öğrenme yerlerinde ve birbirlerine değil, aynı zamanda her zaman birbirine bağlamak için eleştirel ve yaratıcı düşünmeye, işbirliği ve iletişim becerilerine önem verir; ayrıca sosyal, kültürel ve politik ağların çeşitliliğini arttırmayı amaçlar. Bu bakımdan, İngilizce öğretimi basit bir dilsel kod veya bir dizi yeterlilik olarak değerlendirilemez.

İngilizce dil eğitimcilerinin, öğrencileri gelecekte gerçek anlamda ihtiyaç duyacakları otantik görevler ve problem çözme aktivitelerine dahil edecek aktiviteler geliştirmeleri gerekir. Bu katılım öğrencilerin müzakere, işbirliği, hedef belirleme, anlamlı iletişim ve zorlayıcı ürünlerin geliştirilmesi gibi karmaşık proje çalışmalarını yürütmesini sağlayarak başarılabilir. Nitekim öğrenciler iletişim, işbirliği, eleştirel ve yaratıcı düşünceyi içeren yepyeni bir İngilizce dil okuryazarlığı geliştirmeyi öğrenmek durumundadırlar.

Yukarıda belirtilen araştırma problemine paralel olarak, bu çalışmanın amacı, İngiliz Dili öğretiminde 21. yüzyıl becerilerinin çerçevesini tanımlamak ve açıklamaktır. Ayrıca, öğretmenlerin pedagojik anlamlar ve alandaki inovasyon becerilerinin etkileri hakkındaki düşüncelerine yardımcı olmaktadır. Dolayısıyla, İngilizce öğretmenlerinin, 21. yüzyıl becerilerini, bu becerileri geliştirmeye ve İngilizce dersine entegre etmeye yönelik girişimleri doğrultusunda edindikleri bilgi ve anlayışı açıklamayı amaçlamaktadır.

Bu anlamda, öğretmenlerin konuya ilişkin içgörülerine ulaşmak, İngilizce dilinin öğretilmesi ve öğrenilmesinin nasıl geliştirilebileceği konusunda benzersiz bakış açıları ve öneriler sağlayabilir. Bunun yanı sıra, bu çalışma, öğretmenlerin 21. yüzyıl becerilerine ilişkin algıları ile İngilizcenin yabancı dil olarak öğretildiği dersliklerde, konunun teorisi ile uygulanması arasındaki bağlantıları aydınlatarak mevcut bilgi tabanına katkıda bulunacaktır. Son olarak, bu çalışma, yöneticilerin ve eğitimcilerin, 21. yüzyıl becerilerinin öğretmeni ve kolaylaştırıcıları olarak öğrencileriyle rollerini daha iyi anlamalarına yardımcı olacaktır.

Bu nedenle, bu çalışma hem İngilizce öğretmenlerinin hem de öğretmen adaylarının 21. yüzyıl becerilerini okul uygulamalarına aktarmada hayati önem taşıyan dört temel becerinin uygulanmasına yönelik eğitim programlarına büyük katkı sağlayacaktır. Bahsi geçen dört temel becerinin İngilizce öğretmenlerine ve öğretmen adaylarına öğretilmesi, 21. yüzyılın başarılı öğretmenleri olmaları için gereken becerilerle eğitim sahnesine çıkmalarına kesinlikle bir şans verecektir.

Anahtar kelimeler: 21. yüzyıl öğrenme becerileri, yenilik, EFL.

ABSTRACT**AN EXPLORATION OF ENGLISH AS A FOREIGN LANGUAGE (EFL)
TEACHERS' PERCEPTIONS ON 21ST CENTURY LEARNING AND
INNOVATION SKILLS****Hacer KAÇAR****Master Thesis, Department of English Language Teaching****Supervisor: Prof. Dr. Hasan BEDİR****June 2020, 107 pages**

Education in the 21st century emphasizes the increasing impact of globalization and the realization of the demand to support the place of knowledge and communication technic through the influential usage of educational path in terms of literacy in information community at the present time. Innovation skills, in particular, attach importance to critical thinking, creative thinking, collaboration and communication skills to connect students not only at their own locations, learning situations and each other, but also at all times and always. It also aims to increase the diversity of social, cultural and political networks. In this regard, teaching English language cannot be considered neither as a simplistic linguistic code nor as a direct competence to be gained.

Teachers of English are required to invent and apply authentic versatile activities so that students can engage in enjoyable actions and they will have a need hereafter. This participation can be accomplished by enabling students to do complicated project works such as negotiating with each other, collaborating, communicating and producing unique products. Actually, learners have to ascertain to acquire a brand novel English language literacy that includes communication, collaboration, critical and creative thinking. Parallel to the research problem mentioned above, the purpose of this research is to define and explain the framework of 21st century skills in English Language teaching. This study also helps teachers to think about pedagogical meanings and the effects of innovation skills in the field. Moreover, this study aims to explain the knowledge and understanding that English teachers have gained through their initiatives to develop and use 21st century skills in English lessons.

In this sense, achieving teachers' insights on the subject can provide unique perspectives and implications on how to improve the teaching and learning of the English language. In addition, this specific survey will contribute to the available data basis by demonstrating the links between schoolmasters' perceptions of 21st century skills and both the theory and the application of the subject matter in classrooms. Finally, this research will help managers and educationists to realize their significant role with their students as being instructors and facilitators of 21st century skills.

Therefore, this study will contribute greatly to the training programs for the implementation of the four basic skills that are vital for English language teachers and prospective teachers to transfer the 21st century skills to school practice. Teaching these four basic skills to English language teachers and prospective teachers will certainly give them a chance to get on the stage with the skills they need to become successful teachers of the 21st century.

Keywords: 21st century learning skills, innovation, EFL.

ACKNOWLEDGEMENT

I would like to express my gratitude to my supervisor Assoc. Prof. Dr. Hasan BEDİR for his support and motivation throughout the research. I would also like to thank the member of the examining committee, Prof. Dr. Şehnaz ŞAHİNKARAKAŞ for her invaluable feedback and comments. I should thank to Assoc. Prof. Dr. Yasemin DARANCIK for her sincere and considerate support throughout the research. I should also thank to Dr. Fatma KARAÇOBAN as she was always with me and helped me when I could not make my mind and guided me to continue my study. I owe sincere thanks to Dr. Hülya TUNCER as she has always supported and helped me whenever I need her. I am grateful to Prof. Dr. Sedat UÇAR who always encouraged me to continue my academic career as a teacher. I would like to express my appreciation and gratitude to my husband, Erdal KAÇAR, and my two sons for their patience, endless support and love.

This thesis has been supported by Çukurova University Scientific Research Projects Unit with the ID number SYL-2019-12228.

Hacer KAÇAR

Adana / 2020

TABLE OF CONTENTS

ÖZET	iv
ABSTRACT	vi
ACKNOWLEDGEMENT	viii
LIST OF ABBREVIATIONS	xiii
LIST OF TABLES	xiv
LIST OF FIGURES	xvii
LIST OF APPENDICES	xviii

CHAPTER I INTRODUCTION

1.1. Statement of Problem.....	1
1.2. Purpose of the Study	2
1.3. Research Questions.....	3
1.4. Significance of the Study	3
1.5. Limitations	4
1.6. Operational Definitions.....	4
1.7. Chapter Summary	5

CHAPTER II LITERATURE REVIEW

2.1. Introduction.....	6
2.2. Turkish Context of English as a Foreign Language	6
2.3. 21st Century Innovation Skills in English Language Teaching and Learning	10
2.4. 21 st Century EFL Teachers in Turkey	13
2.4.1. 21 st Century EFL teachers' Profile	16
2.4.2. 21st Century EFL Teachers' Education.....	21
2.4.3. 21st Century Innovation Skills (4Cs) for EFL Teachers	27
2.5. Implementing 21st Century Innovation Skills (4Cs) in EFL Classes.....	29

2.6. EFL Teachers Role on 21st Century Innovation Skills and Designing Encouraging Learning Environments.....	32
2.7. Chapter Summary	33

CHAPTER III METHODOLOGY

3.1. Introduction.....	34
3.2. Research Design	34
3.3. Participants and Sampling	35
3.4. Research Context	38
3.5. Data Collection Tools	39
3.6. Procedure	40
3.7. Chapter Summary	42

CHAPTER IV FINDINGS

4.1. Introduction.....	43
4.2. Analysis of the Quantitative Data.....	43
4.2.1. Perceptions of Total Sample.....	43
4.2.2. Perceptions of EFL Teachers according to gender, age, grade level, year of job experience and participation of a professional development programme about 21 st century innovation skills	44
4.3. Findings of Communication and Collaboration sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21 st century innovation skills	48
4.4. The analysis of the scores EFL Teachers got from the Creativity and Innovation sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21 st century innovation skills.....	51
4.5. Findings of Critical Thinking and Problem Solving sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21 st century innovation skills	54

4.6. Findings of Reflection and Awareness sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21 st century innovation skills	57
4.7. Analysis of the Qualitative Data	60
4.7.1. Analysis of Teachers' Perceptions on 21 st century learning and Innovation Skills (4Cs).....	64
4.7.2. Analysis of Teachers' Perceptions on Communication and Collaboration ..	65
4.7.3. Analysis of Teachers' Perceptions on Creativity and Innovation.....	66
4.7.4. Analysis of Teachers' Perceptions on Critical Thinking and Problem Solving.....	67
4.7.5. Analysis of Teachers' Perceptions on Reflection and Awareness	68
4.7.6. Analysis of Teachers' Perceptions about 4Cs in Language Learning Teaching Activities and Strategies to be used	70
4.7.7. Analysis of Additional Comments with Regard to 21 st Learning and Innovation Skills, and its Integration of 4Cs into Classes.....	71
4.8. Chapter Summary	72

CHAPTER V DISCUSSION

5.1. Introduction.....	73
5.2. Discussion on EFL teachers' perceptions on 21 st century learning and innovation skills (4Cs) including creative thinking, critical thinking, communication and collaboration	73
5.3. Discussion about if EFL teachers' perceptions of 21 st century learning and innovation skills (4Cs) differ according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development including this difference is significant or not according to these variables.....	77
5.4. Discussion of EFL teachers' perceptions on the integration of these skills into the EFL classes	79
5.5. Chapter Summary	81

CHAPTER VI
CONCLUSION

6.1. Introduction..... 82

6.2. Conclusions..... 82

6.3. Implications 83

6.4. Recommendations for Further Research..... 85

6.5. Chapter Summary 85

REFERENCES..... 86

APPENDICES 96

CURRICULUM VITAE..... 105



LIST OF ABBREVIATIONS

EFL	: English as a foreign language
ELT	: English Language Teaching
PBL	: Project Based Learning
4Cs	: Critical Thinking, Creativity, Collaboration, Communication.
FLE	: Foreign Language Education
CEFR	: Common European Framework of Reference for Languages
Yls	: Young Learners
FL	: Foreign Language
ELTP	: English Language Teaching Program
MōNE	: Ministry of National Education
ATC21S	: Assessment and Teaching of 21st Century Skills
CEP	: Common European Principles
NGOs	: Non-governmental organization
ELTE	: English Language Teacher Education
OSYM	: Student Selection and Placement Center
NEA	: The National Education Association
PCS	: Partnership for 21st Century Skills
CT	: Critical Thinking

LIST OF TABLES

Table 1.	Overall conceptual 21st century skills model according to ATC21S	11
Table 2.	Theoretical overview of knowledge base of L2 Teachers	19
Table 3.	The Structure of Initial ELTE Programs in Turkey	25
Table 4.	Gender Ratio of the Participants	36
Table 5.	Age Ratio of the Participants	36
Table 6.	The Distribution of Participants According to the Grade Level	37
Table 7.	The Distribution of Participants According to the year of Job Experience.....	37
Table 8.	The Distribution of Participants According to Attendance of any Professional Development Programme.....	38
Table 9.	Descriptive values of teachers' 21st century skills survey scores	44
Table 10.	Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender.....	45
Table 11.	Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21 st Century Innovation Skills or not	45
Table 12.	Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with	46
Table 13.	Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age.....	46
Table 14.	Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience.....	47
Table 15.	Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Communication and Collaboration sub-dimension.....	48
Table 16.	Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21 st Century Innovation Skills or not under the Communication and Collaboration sub-dimension	48
Table 17.	Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level.....	49
Table 18.	Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the.....	50

Table 19. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Communication and Collaboration sub-dimension	50
Table 20. Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Communication and Innovation sub-dimension	51
Table 21. Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21 st Century Innovation Skills or not under the Communication and Innovation sub-dimension	52
Table 22. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under the Communication and Innovation sub-dimension	52
Table 23. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Communication and Innovation sub-dimension	53
Table 24. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Communication and Innovation sub-dimension	54
Table 25. Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Critical Thinking and Problem Solving sub-dimension	55
Table 26. Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21 st Century Innovation Skills or not under the Critical Thinking and Problem Solving sub-dimension	55
Table 27. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under Critical Thinking and Problem Solving sub-dimension	56
Table 28. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Critical Thinking and Problem Solving sub-dimension	56
Table 29. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Critical Thinking and Problem Solving sub-dimension	57

Table 30. Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Reflection and Awareness sub-dimension	58
Table 31. Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21 st Century Innovation Skills or not under the Reflection and Awareness sub-dimension	58
Table 32. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under the Reflection and Awareness sub-dimension	59
Table 33. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Reflection and Awareness sub-dimension	59
Table 34. Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under Reflection and Awareness sub-dimension.....	60
Table 35. The participants and their perceptions (A1, A2, A3, A4, A5, A6, A7, A8)	62

LIST OF FIGURES

Figure 1.	P21 Framework for 21 st Century Learning	9
Figure 2.	Teaching with the 4Cs in Education for 21st century learners	12
Figure 3.	The 12 roles of the teacher	14
Figure 4.	Framework for the knowledge base of language teacher education	24
Figure 5.	The suggested model for ELTE in Turkey	26
Figure 6.	4Cs in Education	28
Figure 7.	Explanatory Sequential Mixed Methods Design	35
Figure 8.	Steps in thematic analysis (Adapted from Braun and Clarke, 2013).....	42



LIST OF APPENDICES

Appendix 1.	21 st century learning and innovation skills (4Cs) questionnaire	96
Appendix 2.	Semi-structured interview questions	99
Appendix 3.	Legal permissions of Adana provincial directorate of National Education.....	100
Appendix 4.	Approval document of Ethics committee, Çukurova University	103



CHAPTER I

INTRODUCTION

1.1. Statement of Problem

21st century education emphasizes the significance of globalising world and increasing realization of the importance about communication technology. According to Ledward and Hirata (2011), “21st century skills are a blend of content knowledge, specific skills, expertise, and literacies necessary to succeed in work and life”. In today’s environment, students grow up with developing technology, access to internet anytime; therefore, 21st century students have already found new ways to learn and improve themselves. In fact, the teachers in this rapidly changing era need to encapsulate the essential qualities, which are quite significant for current learners to achieve in school and job life. Innovation skills, in particular, have a prior focus on critical thinking, collaboration, creative thinking, and communication skills (4Cs) in order to connect the learners not only in their specific life areas and own places of learning, but also to an enormous and enlarging communal, official and cultural systems. Anagün (2018) states the alternative ways to amend the standards of education in 21st century in her article as:

In order to manage the realities of 21st century, learners require education systems to change their practices. It is clear that the goals of education can no longer simply provide basic literacy skills for the students. Education systems should provide higher order thinking skills and competencies for all students. For these reasons, education systems should integrate “21st century skills” into the core curriculum. School systems have to enable students to develop the knowledge, skills and characteristics that will lead them to become personally successful, economically productive, and actively engaged citizens (p.825).

In this regard, English Language teaching requires professional approaches and valuable experiences to turn the lessons into a place where the students learn and enjoy a foreign language. According to Warschauer (2001), “the role of language teaching in the information technology society is to provide English language teaching with new teaching purposes”. Therefore, EFL teachers are expected cultivate entertaining activities for their learners to awake the students’ interest towards the lesson. Warschauer adds, “complex project work involving negotiation, collaboration, goal-

setting, meaningful communication, and the development of challenging products can help accomplishing this objective” (p. 55). Many studies conducted up to now have dealt with the detection of 21st century innovation skills in classroom settings. Nevertheless, there is a need to identify and describe 21st century innovation skills especially in the field of English Language Teaching and it is of vital importance that this study has implications for the teaching of English based on English Language teachers’ insights. The fact is that learners are to master novel language skills such as communication, collaboration, critical and creative thinking (4Cs), because the four C’s of 21st Century skills in English Language Teaching let students create a whole rather than the parts of it.

1.2. Purpose of the Study

In line with the research problem stated above, the aim of this study is to explain and demonstrate the framework for 21st century skills in English Language teaching and aids on teachers’ beliefs about the pedagogical meanings and implications of the innovation skills in the field. It also aims to explain English language teachers’ knowledge and understanding of 21st century skills in line with their attempts to promote and integrate these skills in the English language classrooms. Engaging with teachers’ concerns and insights about the issue under investigation can provide unique perspectives and implications into how the teaching and learning of English language can be improved. The resulting data of this research might be benefited for professional development programs, practicing applications for teachers with a need to adopt the framework for 21st century learning and innovation skills.

The current research is important to comprehend EFL teachers’ perceptions about 21st century skills and its implementation in EFL classrooms. Additionally, this study will guide teacher trainers to see the significance of contributing to teachers’ developments in order to help them be successful with their students. Thus, this study will contribute much to training programs for both EFL teachers and prospective teachers for the enforcement of 4Cs. The annexation of the 4Cs into teacher education programs will definitely create a chance for EFL teachers to succeed in 21st century.

1.3. Research Questions

This current survey will specifically address the following questions to accomplish the aims stated above:

1. What are EFL teachers' perceptions on 21st century learning and innovation skills (4Cs), which are critical thinking, communication, collaboration and creative thinking?
2. Do EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ significantly according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development?
3. What are EFL teachers' perceptions on the integration of these skills into the EFL classes?

1.4. Significance of the Study

The procedure of applying 21st century skills in EFL classroom is not as simple as it can be considered. Bedir (2019) emphasizes that “education in the 21st century gives much more emphasis on gaining necessary skills to learn and sustain learning to meet the needs of the students since the curriculum was not originally structured to meet the societies' demands”. In this light, this study is of great significance in exploring English Language teachers' understanding their own efforts to be able to adjust their styles in line with the innovation skills for language teaching.

Eaton (2010) states that “today's EFL classroom should no longer be focused on grammar, memorization and learning from rote. Rather, it should be conceived of as a space to learn to use language and cultural knowledge as a means to connect to others around the globe”. The findings of this study will try to redound to the benefit of that reconceptualization of the EFL classroom with new and innovating frameworks and approaches for the use of English Language teachers.

Armstrong and Warlick (2004) assert, “the greater demand of this increasingly digital and networked world requires students to be able to demonstrate knowledge, employ information and express ideas compellingly”. Thus, this study will try to enlighten the teachers about the fact that teachers no longer need to have traditional role as explaining the subject matter. Therefore, the scope of the lessons will exactly shift,

and the classrooms may similarly change. As a result, teachers can have a chance to analyse critically what the 21st century skills offer at schools in general and particularly in EFL classrooms in order to enrich their pedagogical processes and instructional practices for teaching English more effectively. Ultimately, the analysis of the findings in the study may inspire English Language teachers to have more positive perceptions in the teaching profession and provide their students with versatile opportunities of learning in the classrooms.

1.5. Limitations

The study is geared to investigate the patterns in participants' beliefs about 21st century learning and innovation skills with a private stress on critical thinking, creative thinking, collaboration and communication skills. Participants' way of implementing these skills in their classrooms, structuring the learning environment to meet the students' needs and managing productivity in educational environments will also be explored. One constraint of the study is that the present study will be done on teachers' perceptions in Adana; therefore, it cannot be generalized to other teachers in Turkey.

Another limitation is that it is not generalized to all English Language Teachers from nationalities other than Turkish since all participants will mostly consist of Turkish teachers whose mother tongue is Turkish language and who are educated in Turkish education system.

1.6. Operational Definitions

English as a Foreign Language (EFL): Use or study of English by speakers of other languages.

English Language Teaching (ELT): The teaching of English to people whose first language is not English.

Second Language (L2): Any language that is acquired after the native language.

21st century skills: Skills that are identified by three sets of skills: (1) learning and innovation, (2) life and career skills, and (3) information, media and technology skills.

4Cs: Skills that are specified as communication, collaboration, critical thinking, and creative thinking. Creative thinking can also be stated as creativity throughout the study without causing any misunderstanding.

Project Based Learning (PBL): A teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.

Partnership for 21st Century Skills PCS: The Partnership for 21st Century Skills is a national organization that advocates for the integration of skills such as critical thinking, problem solving and communication into the teaching of core academic subjects such as English, reading or language arts, world languages, arts, mathematics, economics, science, geography, history, government and civics.

1.7. Chapter Summary

This part gives information about the statement of the problem, aim of the study, research questions, significance of the study, limitations and operational definitions.

CHAPTER II

LITERATURE REVIEW

There is a new argument taking centre stage. It is no longer the usual debate over standards and structures but instead a discussion about how young people best learn in the 21st century, and how we can make schools (and those who work in them) catalysts for vibrant engagement, not simply achievement. By looking at how young people choose to learn, what motivation and love of learning mean in the context of school, and how we can give more emphasis to student engagement and voice, there is an almost inevitable sharpening of focus upon what goes on in and out of the classroom (Paul Hamlyn Foundation, 2008, p. 3).

2.1. Introduction

In this chapter, relevant literature regarding to this research will be presented. Four major areas of relevant literature will be explained in detail. To start with, Turkish context of English as a Foreign Language will be clarified. Next topic will be about 21st century innovation skills in English language teaching and learning. Then, 21st century EFL teachers in Turkey will be explained. Under this title, 21st century EFL teachers' profile, 21st century EFL teachers' education and 21st century innovation skills (4Cs) for EFL teachers will be discussed. After that, implementing 21st century innovation skills (4Cs) in EFL classes will be elaborated. Lastly, EFL teachers' role on 21st century innovation skills and designing encouraging learning environments will be elucidated.

2.2. Turkish Context of English as a Foreign Language

In today's era, gaining knowledge of a foreign language is beneficial to open up the doors of new opportunities around the globe. The English language is "a national and international medium of oral communication" (Chukwuma & Otagbumagu, 2007). English is currently used in many countries either as a first language or as alternative means for cross-cultural intercommunication. Globalizing world accelerated the spread of English which "has affected the language policies and programs all around the world" (Hu, 2007). In Turkey, the national and official language spoken by all Turks is Turkish, meeting the communicational requirements of Turkish society. However, English is the primary linguistic means, which connect Turkey to the rest of the world,

as the knowledge of English is fundamental for international, cultural and commercial relations across the globe.

Indeed, the context of education and the profile of learners have greatly changed. Today's learners grow in a digital atmosphere with internet-based games and Web 2.0 tools. Chen (2010) defined this case as “marching through our schools, carrying a transformational change in their pockets in the form of powerful multimedia handheld devices” (p. 213). That is, technological improvements have altered the conventional applications and renewed the teaching approaches. This situation has made the teachers catch up with the time and improve themselves to build positive relationships with their students. Unavoidably, the process of teaching English as a foreign language teaching styles have been changed tremendously in this fast changing era.

During the last ten-spot, “several changes affecting not only the learners but also teachers and teacher training process have been made in FLE curriculum” (Gürsoy, Korkmaz, & Damar, 2013). Especially since 2005, many changes have taken place in English language policy in Turkish education because of the efforts to join the EU and reach EU standards. In fact, “the new curriculum includes changes both in the former two-tier education system and in FLE” (Gürsoy et al., 2013). “While compulsory education is increased from 8 years to 12 years, starting age both for primary school (5.5 years of age) and for FLL (6.6 years of age, second grade) has been lowered” (Damar et al., 2013; Gürsoy et al., 2013). Because of this change, “second and third grade students have two hours of English lesson and fourth, fifth, sixth grade learners have three hours compulsory FL courses weekly in primary education” (Arslan, 2012).

Based on the works done so far for curriculum, the basic EFL syllabus was edited in 2005. The detailed revision was carried out according to “the principles of CEFR and offered theoretical information on various aspects of ELT along with innovative ideas about how to teach YLs English at different grades” (Ersöz et al., 2006). Bearing some problems in mind, Kırkgöz (2009) explicitly states, “Turkey needs to resolve existing incongruence between the idealized macro policy objectives and their realizations in practice at micro level teaching situations” (p. 681). At this point, there are many challenges to be addressed including EFL teachers, classroom activities, skills to be gained, necessary materials to be used and lastly evaluation processes (Arslan, 2012). Moreover, it obvious that this recent curriculum emphasizes the role of EFL teachers as facilitators with a communicative view.

The English Language Teaching Program – ELTP (MoNE, 2013) was advanced as an outcome of 4+4+4 education policy (2012) and the application of it in English Language classrooms was revised. This renewed ELTP offered a few alterations elaborating on inter-communication among the students with their teachers with the use of English as a tool to explicate what they think. According to this regulation, the fundamentals of ELTP was recasted in terms of instructive regulations, requisite and appraisal to teach and learn English more effectively. This outline stresses that English language teaching has been redefined with new teaching purposes. The goals and objectives that the students are expected to accomplish for each grade are clearly stated with their corresponding structural items, genuine assignments and real-life missions. Consequently, learners of a foreign language are to gain skills suitable for the age they grow and acquire new ways of language capabilities to achieve in their future lives.

Additionally, the students of this millennium are to equip themselves with technological improvements and virtual reality with digital utilizations, which has been also stressed by Black (2009b). In fact, the current ELT curriculum includes collaborative activities, which embrace care, interest, different thinking styles, cooperation, and transmission of information via alternative means. At this crucial point, Bedir (2019) clarifies, “The instructional structures were grounded an eclectic mix of instructional strategies so that learners can learn English as a medium of communication, rather than a school subject” (p.234).

Unavoidably, in our country, there is a concern about how to incorporate new trends and phases in English language classrooms, instructional approaches and teaching materials. As a matter of fact, Pink (2005) discussed, “21st century will be dominated by a different way of knowing, being, and doing, and right-brain capacities will come increasingly to the fore”. This explanation was confirmed by Howard Gardner (2010), who emphasized “a robust temperament, and a personality that is unafraid of assuming reasonable risks, cognitive and physical” (p. 28).

In parallel to what has been stated above, the term of Partnership for 21st Century Skills (P21) flourished following the data taken from the schoolmasters, educationists, work pioneers to exemplify the substantial requirements achieve in both future social life and workforce. The proposals of P21 are highly valued and benefited by hundreds of principals, teachers and colleges in the United States of America. Many instructors and schools in our country as in others have been utilizing this framework in order to place the 21st century skills to the very center of learning.

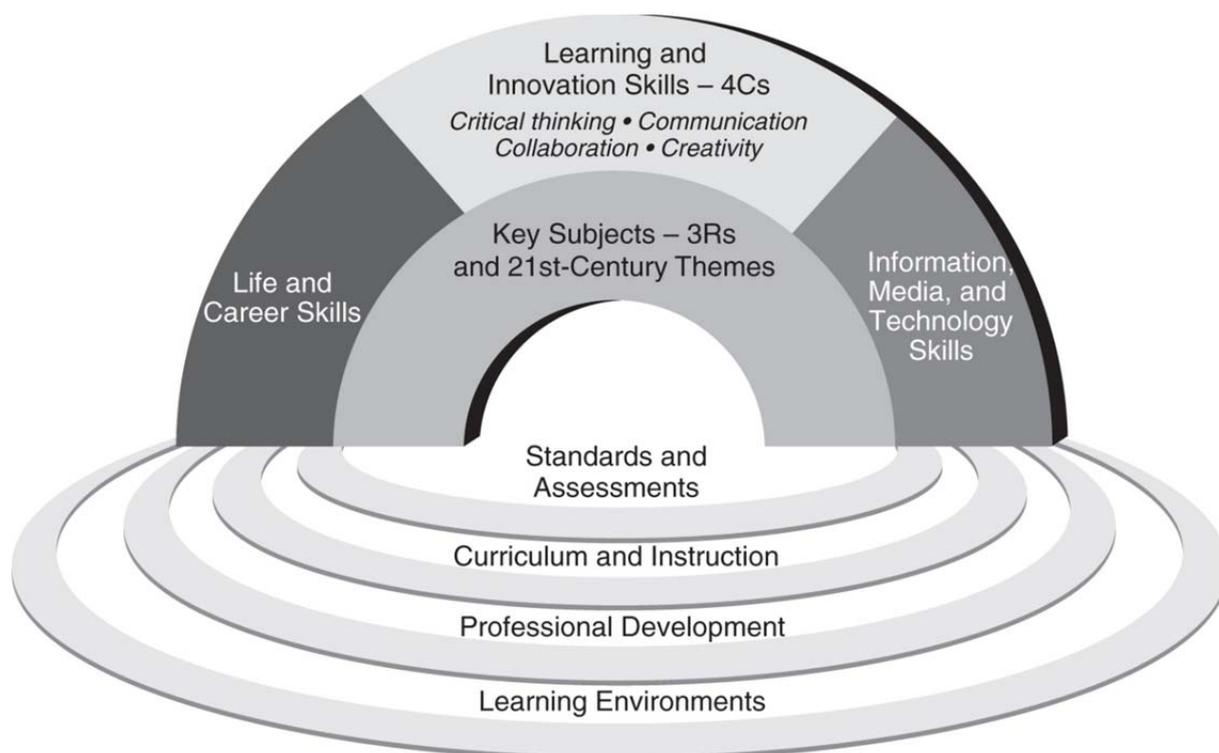


Figure 1. P21 Framework for 21st Century Learning

Source: <https://www.researchgate.net>

Learning and Innovation Skills comes at the top of the framework because these are the most distinguishing skills preparing students for the requirements of the 21st century. Learning and Innovation skills are specified under four titles as 4Cs, which are;

- Creativity
- Critical Thinking
- Communication
- Collaboration

The focus of this study is basically on these Learning and Innovation Skills (4Cs) and the perceptions of the EFL teachers about 4Cs in the Turkish context of teaching English as a Foreign Language. It is obvious that, based on the development of these changes, studying and learning English should be free from the traditional lecture-based classroom. Therefore, some alterations and modifications regarding to ways of lives may give Turkish human beings a change to perceive English with an enthusiastic mood. There is much work to do for educationists to cope up with the changing realities

of time and follow up the correct steps to guarantee the right decisions in language teaching policies.

2.3. 21st Century Innovation Skills in English Language Teaching and Learning

During the late 19th century, novel educational paradigms and teaching methods began to emerge as a result of American reform movements. At that time, “progressive education” was clarified by Jean Jacques Rousseau, Johann Pestalozzi, and Friedrich Froebel (Progressive Education, 2008). Especially, Dewey (1899) believed that “schools should help students learn to live and to work cooperatively with others. In a complex society, ability to understand people and sympathize with others is a condition of common purpose which only education can procure” (p. 54).

In today’s merits, it is impossible to line up with one possible way to meet the 21st century learners’ needs, demands and interests. As Anagün (2018) states,

Although the researchers and educators have come up with many definitions of the 21st century skills, they generally refer to skills required by the learners in order to cope up with the realities and conditions of the 21st century that are different from the previous century in terms of its focus on technology, digital work and more generally on the meaning and application of knowledge (p.826).

In other words, the skills in 21st century include various capabilities like communicating effectively, collaborating with others, solving problems in different angles, being creative, innovating new ways for solutions, doing teamwork, making decisions, applying knowledge and learning alternatively (Partnership for 21st Century Skills, 2009; Organization of Economic Cooperation and Development, 2006; Larson & Miller,2011).

A need for a change in education because of dramatic shifts in all over the world has multiplied principally in the past few decades. There is a common belief that the educational approaches are not adequately developed and organized to help and guide the learners for their future careers with 21st century skills which are “necessary for success in a global economy” (PCS, 2008). PCS stands for Partnership for 21st Century Skills and this partnership specifically focalize the outstanding features for students to gain that will aid them manage in their oncoming livings (PCS, 2009b).

Additionally, in 2010, “Assessment and Teaching of 21st Century Skills (ATC21S)” was introduced by Cisco Systems, Intel Corporation, and Microsoft

Corporation according to Fandiño (2013a). He continues to explain, “the model by ATC21S defined ten universally accepted 21st century skills into four main categories of competencies” and it is clearly stated in table 1.

Table 1.

Overall conceptual 21st century skills model according to ATC21S

Broad Competencies	Ways of Thinking	Ways of Working	Tools for Working	Living in the World
Universal Skills	Creativity and Innovation			Local and Global
	Critical thinking, Problem Solving, Decision Making	Communication and Teamwork	Information Literacy	Citizenship Life and Career
	Learning to learn, Metacognition		Research of sources, evidence, biases	Personal and Social Responsibility
			ICT literacy	Cultural Awareness and Competence

It is clear that this outline suggests the most considerable endeavours for cerebration processes and the most substantial skills that today learners need to be prosperous in this far-reaching world. Moreover, it bears important clues and proposals for schooling to maintain to be “more deliberate about teaching critical thinking, collaboration, and problem-solving to all students” (Rotherham & Willingham, 2009, p. 17).

In parallel to this, there are visible shifts that are currently coming about in English language teaching. Most importantly, the alterations in teaching inevitably influence the learning and teaching processes both in the globe and in our country. Particularly, 21st century learning and innovation skills including communication, critical thinking, collaboration and creative thinking play great role in many pedagogical applications.

Constantly, these namely underlined skills give directions to today's classroom practices and guide the teachers about the ways of promoting the quality of their teaching studies. Teaching with 21st century learning and innovation skills (4Cs) in Education for 21st century learners can be illustrated as:

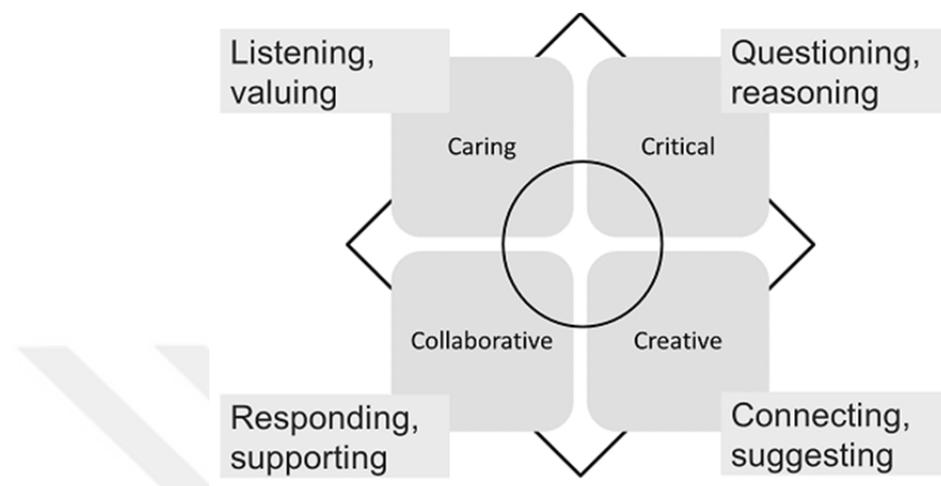


Figure 2. Teaching with the 4Cs in Education for 21st century learners

Source: <http://21stcenturylearners.org.uk/>

The figure clearly shows that reasoning, valuing, supporting and suggesting highly backs the communicative and collaborative ways of teaching. Halvorsen (2018) states, “all four-language skills can easily be activated when students are asked to research a topic, discuss or debate that topic with peers, and write about what they find”. In addition, such tasks give chance to each grade level to enjoy learning a language and manage studies and disputations at the same time.

The skills defined above are substantial for the confirmation of students' success in diversified environments of 21st century. Curricula, schooling and learning atmospheres need to be reorganised to construct a supportive, positive learning and teaching atmosphere that will guide today's students to reach the 21st century outcomes. Twenty-first century skills can be described as comprehensive, generic and speechless and they entail “distributed learning” (Bransford et al., 2000; Sawyer, 2006). The improvement of these skills requests “an orchestrated and coherent learning environment at curricular levels” (Lee et al., 2013). Hereby, the profound comprehension 21st century innovation skills (4Cs) are quite crucial. Similarly, the role of EFL teachers need to be underlined as they are the ones who will implement those

skills and make the required arrangements in EFL classrooms to play a role in the students' cognitive and affective outgrowths.

2.4. 21st Century EFL Teachers in Turkey

In Turkey, the interchanging paradigms in the field of education has brought together new regulations in order to customise the Foreign Language Education nationwide. Prof. Dr. Ziya Selçuk, Minister of National Education, affirms,

We bear witness to the rapid changes in all parts of life in the in 21st century. According to the needs of children, a master teacher can reconstruct the curriculum and seize the opportunity to educate them. The Turkish word for curriculum, *müfredat*, comes from the root *fert* - or individual. That fert is the child/student and the treasure he or she holds within. Teachers, in turn, must polish that hidden treasure into a gem. All we can do is to guide them. Personality builds personality. If a given teacher's personality lacks the necessary maturity and strength, technology and physical infrastructure cannot perform his/her tasks (Turkey's Education Vision, 2023).

EFL teachers are the keys for shaping English language teaching as enjoyable and interesting for Turkish learners in parallel to innovations of this century. In other words, the infusion of 21st century skills with today's learning environment necessitates EFL teachers not only master the subject-matter but also know how to manage the lesson with regard to different contexts that would take place at the time of teaching. Therefore, these various roles can be described in figure 3;

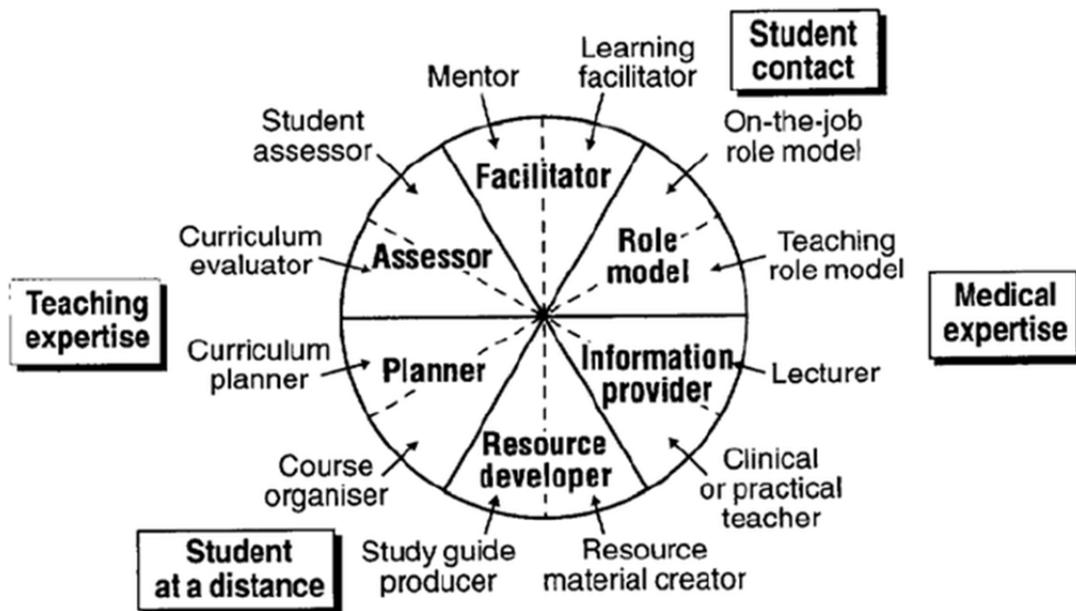


Figure 3. The 12 roles of the teacher

Source: Harden et al, 2000

As in the previous curriculum, the recent curriculum underlines the place and role of teachers as facilitator and planner with a communicative perspective to ELT. The teachers' being at the middle of teaching is because of using their capacity as successfully and effectively delivering a learning, which is regarded as the main denominator of value. In doing so, teachers learn about the profession and the world around them through interactions, consultations, experimentations, reflections and solving problems, but also by observing other professionals in schools and outside (Eraut, 2007; Bakkens et al., 2010 as cited in Kovacs, 2017). According to Illeris (2009; 2015), "the interaction between the learner and the environment, which once absorbed and connected to prior learning, produces a new learning outcome and this new learning can transpose into a cognitive, emotional and/or behavioural change". Therefore, in today's transforming era, the teachers are to equip themselves with brand-new knowledge and skills in order to guarantee remarkable learning in the classroom environment. As Kwo (2010) asserts, "teacher learning in the 21st century is no longer an option but a sort of a moral duty that comes with the profession and to be able to conduct their jobs". Moreover, teachers need to know how to work with others, different types of information and technology along with how to work and behave in society (European Commission, NN).

Additional to this, the teachers are to set up ties between the 21st century education and outcomes with competence in knowledge about the subject knowledge and 21st century skills regarding to the liability of student-centered teaching at schools in general and exclusively in EFL classrooms. In first place, rigid, tailor-made academic standards should not hinder real-life learning and should ensure the terms about 21st century skills. Zhao (2009) with his work “Catching Up or Leading the Way: American Education in the Age of Globalization” summarizes basic assumptions that the schooling is to think about what to teach:

1. Skills and knowledge that are not available at a cheaper price in other countries or that cannot be rendered useless by machines;
2. Creativity, interpreted as both ability and passion to make new things and adapt to new situations;
3. New skills and knowledge that are needed for living in the global world and the virtual world (examples include foreign languages, global awareness, and multicultural literacy, and knowledge to cope with the global world, and digital or technology literacy for the virtual world);
4. High-level cognitive skills such as problem solving and critical thinking;
5. Emotional intelligence - the ability and capacity to understand and manage emotions of self and others, the ability to interact with others, understand others, communicate with others, and manage one's own feelings (p. 150-151).

Classrooms can be said to “expand beyond the physical walls that many teachers are accustomed to” (Halvorsen, 2018). This fact advocates the idea that instructors not only teach the language in the class environment but also make their students gain the skills of how to communicate in the real-life contexts. According to Common European Principles for Teacher Competences;

Teachers should be equipped to respond to the evolving challenges of the knowledge society, participate actively in it and prepare learners to be autonomous lifelong learners. They should, therefore, be able to reflect on the processes of learning and teaching through an ongoing engagement with subject knowledge, curriculum content, pedagogy, innovation, research, and the social and cultural dimensions of education (EU, 2010).

Teachers' proficiencies in these areas should be supported with new regulations so that they can adopt new orientations in ELT and apply them in their teaching style. According to MoNE (2013), "when it comes to the application into practice, there are numerous factors playing a role in the implementations such as school administrators, facilities, classroom resources and materials, teachers, class size, parents, and the students themselves" (p.4).

21st century teachers have a need for redefining their teaching practices and processes so that English Language learners in this century can acquire and develop varied abilities in order to accomplish, participate and be creative in this new technological environment in parallel to learning English as a communication tool. EFL teaching has been reconceptualised under the tremendous innovations of 21st century, which makes EFL teachers inquire and learn about 21st century skills (4Cs). Therefore, there is a desideratum to explain the 21st century Teachers' profile, 21st century EFL teachers' education and 21st century innovation skills (4Cs) for EFL teachers.

2.4.1. 21st Century EFL Teachers' Profile

English Language teachers, in today's conditions, have to do and have to be a lot more than in the past. The recently launched vision document (MoNE, 2018) seems quite reassuring about the policies to be followed between 2019-2023 in Turkey. Enhancement of English Language teaching profession and increment of language teachers' competencies are encompassed in the vision document.

The explanation by MoNE (2007) demonstrates some findings about Turkey:

Turkey is one of the leading countries of the world in terms of value attached to teachers. According to Global Teacher Status Index, Turkey is ranked third in the world in terms of reputation of teachers in the society. In the Professional Reputation Survey for Turkey, supported by the Scientific and Technological Research Council of Turkey, teaching is indicated as having the fourth highest status in society among all professions. According to 2006 PISA data, the percentage of those who stated having a plan to become teacher among 15-year-old students is 25%. Turkey ranks first with this proportion among OECD countries.

EFL teachers' choice of methodology, strategy with their competence and performance determines the effectiveness of the language teaching processes. Therefore, the effectuality of teaching process relies upon the language teacher as

having a role of supporting, leading, promoting and accelerating the outgrowth of learning. European profile for language teacher education in twenty-first century attaches importance to the preliminary and on-the-job education of foreign language teachers at all levels. A “frame of reference” for language teaching policy makers and language teacher educators in Europe is provided and the report of the study offers about forty different areas of training that a language teacher needs (Kelly et al, 2004).

As being a component of the pedagogical amendments occurring in Turkey, MoNE has launched varied programs to cultivate English Language Teachers’ competencies. In 2006, MoNE listed common teacher proficiencies as “personal and professional values-professional development, knowing the student, learning and teaching process, monitoring and evaluation of learning and development, school-family and society relationships, knowledge of curriculum and content”. In 2008, MoNE revised these qualifications and clarified subject-matter sufficiencies for English Language Teachers, which can be listed as below:

- 1) Planning and designing the process of teaching and learning – This domain involves planning teaching and learning process, designing appropriate environments, preparing materials and utilising resources.
- 2) Developing Language Skills - This domain involves the designing activities intended to develop language skills using English language teachers’ language learning and teaching theories, approaches and techniques, using English accurately and effectively and considering students’ needs.
- 3) Monitoring and Assessing the Language Development - This domain involves the practices of identifying, monitoring and assessing development of students in English language teaching process.
- 4) To collaborate with the school, parents and society This domain involves collaboration with parents to support the process of English language learning, being leader of society, making school centres of culture and learning, ceremonies and organisations held in the school.
- 5) To be enable his/her professional development in English Language Teaching - This domain involves the practices of the teacher in terms of professional development to support the process of English language teaching.

In 2018, Ministry of National Education has declared that the competences of teachers will be advanced in foreign language training in Turkey’s Education Vision 2023. According to the vision:

Post-graduate programs, international certification, theme-specific certification and similar training activities will be organized through and offline methods for all foreign language teachers. This will be done within the framework of three-year projections, with the support of international organizations, higher education institutions, and NGOs. For high-quality foreign language education, a National Foreign Language Education Council will be created to establish foreign language education policies, education standards, and in-class practices as well as teacher qualifications (MoNE, 2018).

Both developed and developing countries take heed of improving the quality of language teaching and take deep-rooted steps for language teachers' training to increase the level of teaching and learning processes. It is because of the fact that EFL teachers not only need to be the masters of their profession but also have to be the artist of it. In addition, it is remarkable to underline the change of EFL teachers' profile when the knowledge base of L2 teachers are taken into consideration. Focusing on the skills and competencies separately is no longer the concern for L2 teachers who strive for developing sociocultural perspectives.

Diverse proposals about what constitutes knowledge base exemplify struggles about proposing views for teachers to use knowledge they get from curricula and context effectively. Faez (2011) explains, "knowledge base refers to the expertise, understanding, awareness, knowledge, and skills that L2 teachers need to possess in order to be effective teachers in second language teaching". Fandiño (2013b) provides a summary of this theoretical overview in table 2:

Table 2.

Theoretical overview of knowledge base of L2 Teachers

Knowledge base in second/ foreign language	Lafayette (1993)	Language proficiency
		Civilization and culture
		Language analysis
	Day (1993)	Content knowledge
		Pedagogic knowledge
		Pedagogic content knowledge
		Support knowledge
	Richard (1998)	Theories of teaching
		Teaching skills
		Communication skills and language proficiency
Subject matter knowledge		
Pedagogical reasoning and decision making		
Freeman and Johnson (1998)	Contextual knowledge	
	The teacher as learner of language teaching	
	Schools and schooling and sociocultural contexts for teaching learning	
Tarone and Allwright (2005)	The teacher's pedagogical thinking about teaching, the subject matter and its content and the language learning process.	
	The second/foreign language learner	
		The learner learning
		Research on second language acquisition

Moreover, sociocultural theories negate the restricted explanations for learning because those theories argue that learning a language is a continuum of identity generation. Teachers are thought to be “*transformative intellectuals*” instead of only distributing the information (Auerbach, 1995; Giroux, 1988; Pennycook, 2000 as cited in Korkmazgil, 2015). This means that teachers can build bridges between the learners and the subject matters. By this way, the learners not only acquire the forms and rules of the target language but also they become aware of social issues. The only way for a

teacher to accomplish to be a transformative intellectual is to improve their professional developments and have wider point of views.

On the other hand, Canagarajah (1999) critically argues, “most of the world’s English teachers are not native-speakers of English and it is not necessary to have a native-like command of a language in order to teach it well”. EFL teachers definitely need to possess content knowledge, pedagogical implementations, technological applications and assessments skills to cultivate the language teaching profession. The challenge for 21st century language instructors is to get the required class skills in order to manage the classroom context fluently.

As EFL teachers accumulate and renew experimentation and information, they can start teaching in an impromptu way quite easily in the course of time. Thus, Borg (2009) explicates several qualities of professional teachers.

- They have a wide repertoire of routines and strategies that they can call upon
- They are willing to depart from established procedures and use their own solutions and are more willing to improvise
- They learn to automatize the routines associated with managing the class; this skill leaves them free to focus on content
- They improvise more than novice teachers – they make greater use of interactive-decision making as a source of their improvisational performance
- They have more carefully developed schemata of teaching on which to base their practical classroom decisions
- They pay more attention to language issues than novice teachers (who worry more about classroom management)
- They are able to anticipate problems and have procedures available to deal with them
- They carry out needed phases more efficiently, spending less time on them
- They relate things that happen to the bigger picture, seeing them not in the context of a particular lesson
- They distinguish between significant and unimportant issues that arise.

Several different practices in the body of professional development programs can help teachers go a step further in their teaching profession although there are still some who are close to personal development. At this point, teamwork, groupwork, cooperation with others may aide these teachers to develop a sense of being a part of a community and feel a need to improve themselves. Richards (2010) explains, “making the transition from seeing oneself as a self-contained independent individual to seeing oneself as a member of a community of practice is an important component of the shaping of teacher identity and an important milestone in professional development”.

Teaching English as a foreign language in 21st century can be described as a specialized profession, which requires academic training and applied knowledge. Improving language teachers' profile requires not only professional training but also specifications of 21st century skills to raise the level of EFL teachers' proficiency and efficiency. In order to reach a conscious and systematic language teaching profile, EFL teachers need to be shaped with 21st century innovation skills (4Cs).

2.4.2. 21st Century EFL Teachers' Education

In this globalising world, one cannot refrain from learning English, the most preferred foreign language both at public or private institutions nearly all grade levels in numerous countries. Can (2005) states;

English language, the necessity and significance of which are beyond any controversy, and which is a global communication tool in many fields, has been taught at all schools as one of the compulsory courses of the program by the English teachers appointed by Ministry of National Education.

In this new century, EFL teachers possess several duties apart from teaching the target language. They are to learn as a teacher and make contributions to their students' understandings of both the language and the context and culture of it. According to MoNE (2007), "this important social transformation is increasing the importance of high-level cognitive skills such as effective communication, recognizing different cultures, developing high-level cooperation, global competency, and solution-focused thinking". Therefore, English Language Teacher Education (ELTE) is considered to be a brand and detached area of expertise since the early years of this millennium.

The change in technology, economy and social life in Turkey has created a need to educate EFL teachers for the realities of classroom contexts. Many shifting paradigms has made it compulsory to renew the EFL teacher education programs as the achievement in schooling leans on schoolmasters' qualifications to a great extent. The interest in foreign language teaching is increasing day by day caused by economic, social, educational and scientific developments (Aydoğan and Çilsal, 2007). Therefore, "Turkish national foreign language education policies, like the rest of the world, mainly focus on the teaching of English as a foreign language as English is the most commonly spoken international language all over the world" (Bektaş and Altıok, 2006).

In Turkey, educational programme for teachers has been for many years, but the development programs for foreign language teaching education are new. In fact, “foreign language teachers are either the native speakers of the target language or the non-native but expert teachers of that particular target language” (Day, 1993). In Turkey, diverse faculties with similar content and properties offer programmes for language education.

English Language Teacher Training programs are in the Faculty of Education. There are 55 faculties of education (40 state universities and 15 private and/or foundation universities) in Turkey and five faculties of education in North Cyprus Turkish Republic. The training program at Faculties of Education consists of four years unless the program covers one-year intensive English preparatory, in which case 1+4 years. The curriculum is offered by the Higher Education Council (HEC), and revised to meet the demands of the national and international changes in education from time to time. ELT departments follow a standard and obligatory program for educating prospective English teachers.

The graduates of English Language Teacher Training Department have right to start teaching in any educational institution after graduation without any additional requirement apart from the KPSS score (the Selection Exam for Professional Posts in Public Organizations), which they need to be selected for the positions at public schools. However, English Language and Literature, American Language and Culture, Translation and Interpretation, and English Linguistics graduates have to attend and complete a pedagogic formation certificate program for two semesters to become an English teacher. “Statistical records by MoNE indicate that of the 31,248 English language teachers in primary and secondary schools, 21,178 (67,7%) are ELT graduates, 6,486 (20,7%) are other English majors and 3,548 (11,4%) are graduates of other faculties” (MoNE, 2013 as cited in Mirici and Ekşi, 2016).

During the years of 1980, teaching English got great significance and thus the education of teachers gained the parallel stature. Kırkgöz (2007) summarizes;

The introduction of Anatolian high schools which aimed English-medium instruction in 1980s, establishment of foreign language intensive high schools which had a preparatory and intensive focus on English classes in early 90s and finally introduction of English classes as early as 4th and 5th grades, which later evolved into introduction of English in 2nd grade led to an increase in the demand for teachers of English.

Many attempts have been done to satisfy the language teachers' professional development to increase the quality of education, but those tries "could have never been fully satisfied" (Can, 2005; Seferoğlu, 2004).

Following to this, "later in mid-90s, the concerns for teacher education increased with the raising demands for language teachers, which led to the initiation of reform practices in language teacher education" (Kırkgöz, 2007). HEC regulated the curriculum for English Language Teaching programs between the years 1997 and 2006 including academic lectures with "language proficiency (such as Oral Communication and Advanced Reading), language specialization courses (such as translation, linguistics), general educational courses (such as theories of education, developmental psychology) and language pedagogy courses (such as methodology, materials design, testing)".

Despite the high numbers of graduates, the teacher supply cannot easily be met for both the Ministry of National Education (MoNE) and for state and private institutions. Therefore, Seferoğlu (2004) clarifies;

There is an alternative certification program for English Language Teacher education and alternative teacher education practices differ from traditional teacher education in terms of length, number of courses offered and whether they include practicum or not. Students or graduates of English-medium universities and of English-language related areas are certified through compact programs with a very brief training which in many cases did not include any practice teaching, which are usually referred to as pedagogical formation certificate programs (p.153).

From this perspective, there are different implementations regarding to these certificate programs but this does not mean that they are poor in educating successful teacher candidates. According to Ekinci (2012), there are three teacher education policies to be followed and these are listed below:

1. Training teachers for elementary and secondary schools through different programs offered in education faculties; the main objective of the students attending these programs is assumed to be a teacher.
2. Teacher training through "master's programs without thesis" offered to the graduates of the faculties apart from education faculties.
3. Teacher training through "teaching certificate" programs offered to the students of faculties apart from education faculties (p. 21).

For both alternative and traditional teacher education practices, the focus in teacher preparation programs turned to how teachers learn what they know rather than what they need to know and teachers began to be regarded as learners within the social and cultural contexts of institutions and their learning was regarded as a developmental process. Informed with these shifting paradigms, Freeman and Johnson (1998) put forward the information basis of education for language teachers with the framework with figure 4:

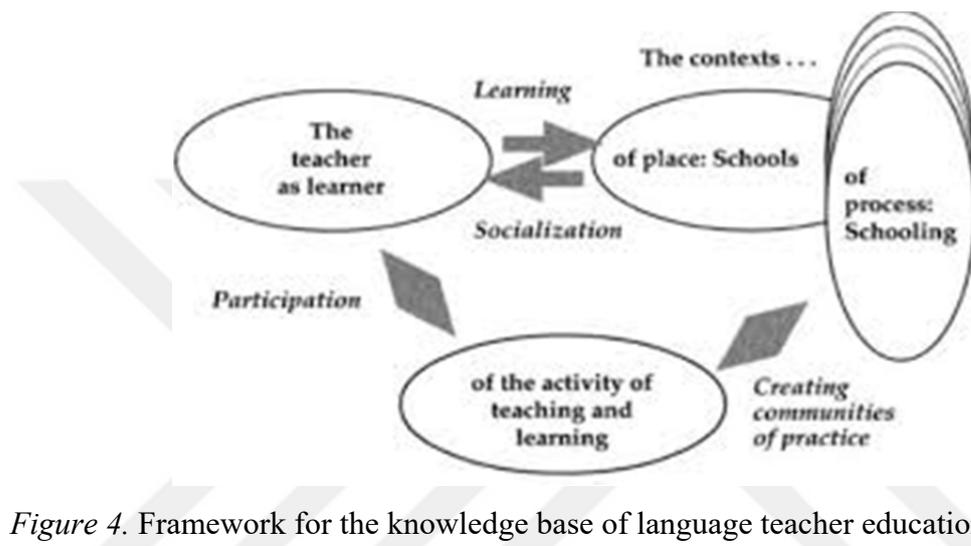


Figure 4. Framework for the knowledge base of language teacher education

Source: <http://www.ajesi.dergi.anadolu.edu.tr/>

This framework is still a valid one in ELTE in addition to labelling the characteristics of teachers' learning process as "a form of socialization into the community of practice" (Richards, 2008). It is clear that teachers are individuals who socialize, participate and learn at school as a learner at the same time. Any teacher education program cannot be isolated from social interaction and collaboration as the teaching will take place in class-cultural contexts as a developmental process.

In fact, countries with a reputation of qualified teacher education systems put the teachers at the centre of teaching programs and require them to be awake and attentive during the teaching process as professionals in their fields. On the other hand, Öztürk and Aydın (2019) states that Turkey has fallen behind in responding to the dynamic nature of ELTE policies throughout the world taking the realized educational reforms in the country into considerations as it is a developing country which has undergone recent socio-cultural and political changes with the impact of large migration streams leading to a multi-cultural society.

ELTE in Turkey experienced several modifications during recent years (Mahalingappa and Polat, 2013) and a very recent one was introduced in late 2017, presenting the final structure of initial teacher education program. When the components of ELTE in Turkey is analysed, two main components as pre-service education and in-service education have been conducted.

As the central decision-maker in the unified-model of higher education in Turkish context, HEC has performed several attempts, each of which had the claim that “the existing system is deficient in its goals, accomplishments and responsiveness to global changes” (Kırkgöz, 2017, p. 241). As a matter of fact, the latest reform announced in 2018-2019 academic year consists of various changes in names and the credits of courses to be taken without making new regulations regarding to content and the quality of the programs.

Öztürk and Aydın (2019) describes the structure of initial ELTE programs which is not significantly different from the previous one in table 3.

Table 3.

The Structure of Initial ELTE Programs in Turkey

Content	%
(CK) Content Knowledge	48
(PK) Pedagogical Knowledge	34
(GC) General Culture	18

During the recent years, MoNE has endeavoured much to advance the standards of teacher education by identifying generic teacher competencies (MoNE, 2006), competency domains and performance indicators (MoNE, 2008) and published the Teacher Strategy document in 2017. However, their integration to real life practices and implementation in teacher education still needs to be cultivated. The fact is that Turkish teacher education lacks necessary regulations and programs to improve their teachers for the 21st century skills in parallel to addressing today’s learners’ needs and guiding them to shape their future. Accordingly, ELTE programs offer theory-oriented education without embracing real-life implementations, which creates problems for prospective teachers to apply the theory into practice when they become teachers. Studies evaluating Turkish ELTE program confirm the existence of such a big theory-

practice gap problem (Şallı-Çopur, 2008; Karabuğa, 2016; İpek and Daloğlu, 2017). 21st century learning environments make teacher education policies correspond to the requirements brought by the changing roles of teachers in this new era.

Overall, a new curricular perspective and the practical experience of teaching along with the 21st century innovation skills (4Cs) are keys to increase the teachers' efficiency during the teaching processes. As stated by most of the international reports (Kelly and Grenfell, 2004; OECD, 2005; UNICEF, 2017 as cited in Öztürk and Aydın, 2019) teacher development should be viewed as a continuum in today's standards and Turkey needs to take those urgent steps to meet the standards in in-service ELTE programs. Those urgent steps are illustrated in figure 5:

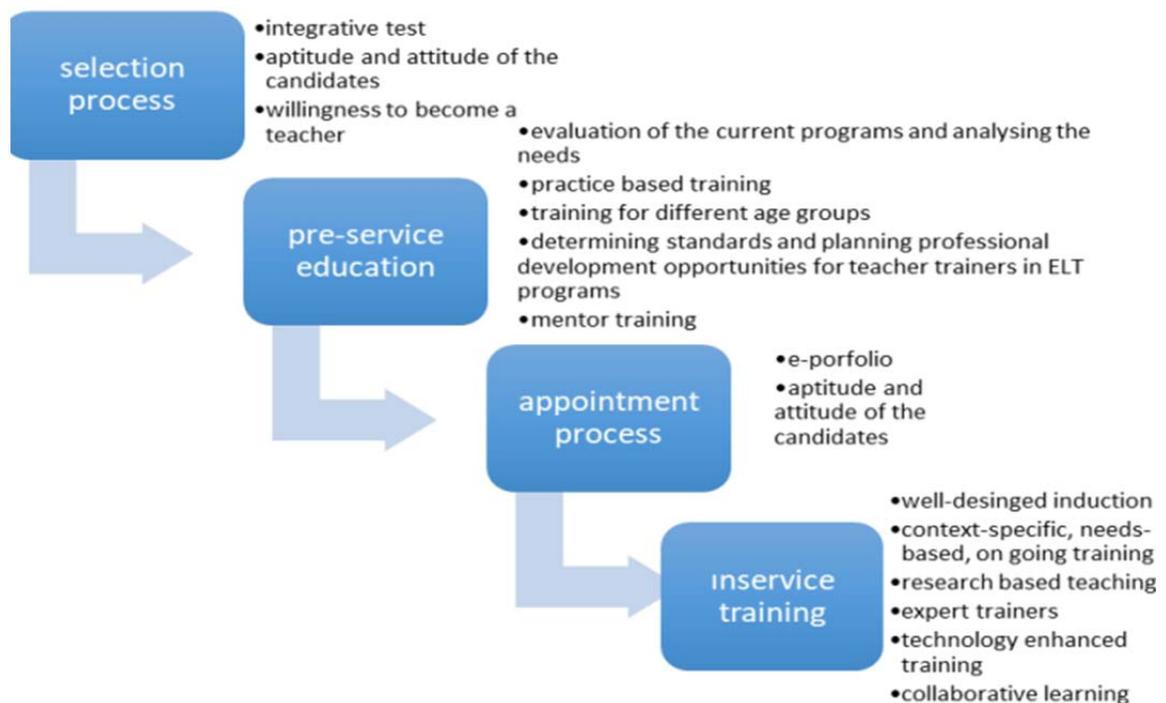


Figure 5. The suggested model for ELTE in Turkey

Source: Öztürk and Aydın, 2019, p. 20.

Ziya Selçuk, Minister of Turkish Education, stated that teachers are the corner stones of Turkish schooling framework and the grade of their qualifications determines the overall effectiveness of education while delivering his 2018-2019 academic year opening speech underlined the plans for teacher training project all over the country. Although, the quality enhancement efforts in teacher training have already started in Turkey (Grossman et al., 2010), this restructuring reform is still incomplete. As “the quality of teachers determines the quality of education” (Seferoğlu, 2004), the training

of teachers both at the pre-service and in-service programs is not a negligible issue. Overall, the main policy makers for ELTE Programs in Turkey are Student Selection and Placement Center (OSYM), Turkish Higher Education Council (HEC), Ministry of National Education (MoNE) and Education Faculties. The harmony and cooperation among all these stakeholders play an important role for shaping future EFL teachers with 21st century innovation skills (4Cs) and strategies.

2.4.3. 21st Century Innovation Skills (4Cs) for EFL Teachers

Integration of the competences in 21st century into education is a universally advocated issue among educationists. In *OECD Learning Framework 2030*, it is explained:

Education plays a vital role in developing the knowledge, skills, attitudes and values that enable people to contribute to and benefit from an inclusive and sustainable future. It will be essential to learn how to form purposeful goals, work with others with different perspectives, find opportunities and identify multiple solutions to big problems in the coming years. Therefore, education needs to equip students with the skills they need to become active, responsible and engaged citizens (OECD, 2018).

Although the concept of 21st century skills was developed in 2007 in USA as an attempt to improve education outcomes in order to prepare USA citizens for the demands of 21st century workplace, the introduction of these skills has made a fundamental change in the aims of education. Accordingly, many curricula development plans and programs have been designed and conducted for the purpose of integrating these skills, which necessitates a change in the materials being taught, the methods of teaching being used and the assessment strategies being employed (The Partnership for 21st century skills, 2007).

4Cs, a brand notion, includes ‘critical thinking’, ‘collaboration’, ‘communication’ and ‘creativity’ as 21st century skills. Being creative, thinking critically, collaborating with peers and communicating effectively open the doors for learners who want to be successful in the future. Educationists must modify the subject-matters in parallel to 4Cs if they aim to raise students as equipped with necessary skills to compete in the “global workforce” (Erdoğan, 2019). Moreover, The National Education Association (2015) indicate:

80 percent of executives believe fusing the 4Cs would ensure that students are better prepared to enter the workforce. According to these managers, proficiency in reading, writing, and arithmetic is not sufficient if employees are unable to think critically, solve problems, collaborate, or communicate effectively.

According to American Management Association in USA (2019), the AMA 2010 Critical Skills Survey, the “4Cs” will gain much more importance in the next coming years. The Association claims that most of the participants answered the research believe that these skills will be vital for any organization to flourish in this fast growing globalised market. In fact, these skills are regarded as key skills for students in 21st century, which determine the education policies all around the world for the previous decade. Teachers of English need to take these skills into consideration during their classroom practices as Halverson (2018) indicates by figuring 4Cs in Education.

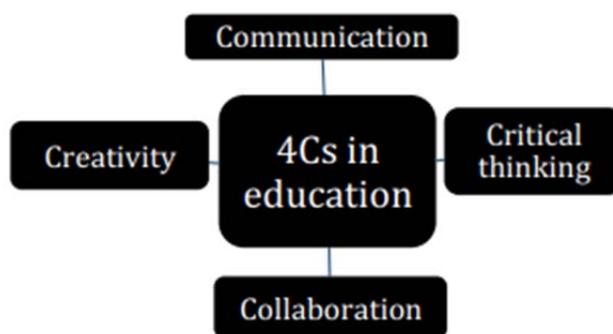


Figure 6. 4Cs in Education

Source: <https://scholarsbank.uoregon.edu/>

Therefore, incorporation of the 4Cs in language teaching and learning in FL contexts is urgent to prepare students for the future. EFL teachers play a huge role in integrating them into the processes of learning and teaching and fostering them. Unless 21st century innovation skills are actively practiced in the classroom, the students will not learn these sophisticated skills and critically analyse information for future use.

According to Erdoğan (2019), without modifying the curriculum by including these skills in the classes, teachers may fail to prepare the pupils for the coming era. He describes each skill (4Cs) as below:

- Communication and collaboration skills enables students to interact competently and respectfully with others especially across cultural, in diverse and multinational workplaces and communities in our global and digital era.
- Creative thinking skill enables students to think unconventionally, question the herd, imagine new scenarios and produce astonishing work since many of the fastest-growing jobs and emerging industries rely on workers' creative capacity.
- Critical thinking and problem solving skills enables students to judge the information that comes their way every day - on the Web, in the media, in homes, workplaces, etc. It empowers our students to assess the accuracy and value of information, analyse and evaluate information, make reasoned decisions and take purposeful action. Businesses expect employees at all levels to identify problems, think through solutions and alternatives, and explore new options if their approaches do not pan out.

Fandiño (2013) supports the idea that EFL teachers design, organize and use stimulative activities and tasks for their students. They are to create situations in which their students can freely state their ideas, develop positive relationships with their friends and comprehend different point of views without having prejudices. This means teachers are to ascertain these characteristics of 21st century skills to revive their pedagogical and instructional practices. The learners are at the centre of teaching and they should be supported for collaboration during the process.

As long as teachers apply the 4Cs into EFL classes, they can have an active role as facilitator and students become inspired, self-guided learners-who still manage to work inside of the confines of the curriculum. In order to achieve the application of 4Cs into FL contexts, teachers need to revise and reorganize their plans. As Halvorsen (2018) states, “the 4Cs are essential in the education sector because they are inherent in the nature of teaching and learning processes in 21st century”.

2.5. Implementing 21st Century Innovation Skills (4Cs) in EFL Classes

Understanding the importance of modelling the 4Cs not only in the classroom practice but also among educators has vital importance for the implementation of these skills. At this point, the most important question to be answered is to express how educationists can find ways to include 4Cs in the class practices and make sure that language teachers are capable of using them effectively. The National Education Association (2015) suggests unless teachers are qualified professionally enough they will be unsuccessful to raise the productivity of their courses.

Critical thinking is one of the four Cs, without which one cannot learn well. Implementing this skill in an effective way in the class is of great significance for

learners because problem solving can help students for concentrating better, interpreting well and making synthesis. According to Herrmann (2015):

The skills of critical thinking and problem solving include using knowledge, facts and data to solve problems. Through critical thinking and problem solving, students can make appropriate decisions and judgments using what they have learned or read, use inductive and deductive reasoning, analyse complex systems, and determine how parts of a whole interact with each other.

Klynhout (2018) recommends that to implement critical thinking in the lessons, “questions with only one right answer or that can be answered with a simple Yes or No should be avoided”. Rather, questions such as How do you know..., What tells you..., Why...? can be preferred to see the level of their understanding. Moreover, conducting discussions, working as group, preparing posters, creating real-life problem and finding solutions can offer situations for students to gain critical thinking skills.

Communication in the target language is part of 4Cs, by which the learners can express their ideas and choices making use of verbal or non-verbal ways of communicating with others. Apart from knowledge of grammar and vocabulary of the target language, the students need communication skills to interact with other human beings around the globe by the help of technology. Ananiadou and Claro (2009) indicate, “ICT applications strengthen and increase the possibilities of communication and reinforce the development of skills of coordination and collaboration between peers”.

Erdoğan (2019) underlines the fact that technological tools are the great actors in this era and they give both teachers and students a chance to communicate with people from different societies. Moreover, many projects such as e-twinning, sister school, student exchange programs can enable students get in touch with each other.

The third C stands for collaboration, which is an indispensable part of achieving a work together. Applied Educational Systems (2019) defines collaboration as “the practice of working together to achieve a common goal”. Palmer states:

Collaboration should go beyond sharing documents via email or creating PowerPoint presentations; creating digital resources, presentations, and projects together with other students will make classroom activities resemble the real world. Furthermore, writing a short story, completing a half story, making short films on a given topic, drawing conclusions from a reading material can be good ways to promote collaboration skills in a language class (Palmer, 2015 as cited in Erdoğan, 2019).

The last C of the innovation skills is related with creativity, which is closely intertwined with some of the other 4Cs previously explained. Creativity is generally connected with creative thinking, imagination and innovation in education. Torrance, offered the most cited definition, characterized creativity as “the process of sensing a problem, searching for possible solutions, drawing hypotheses, testing, evaluating and communicating results to others” and described as “including original ideas, different points of view, breaking out of the mould, recombining ideas, and seeing new relationships among ideas” (Torrance, 1970:27 as cited in Saleh, 2019). The implementation of creativity as skill to EFL classes is not an easy task to accomplish. However, according to Halvorsen (2018), the instructors must be aware of the individual differences of their learners and bear in mind that they are to be flexible enough to listen their students when they need. The students should also be given enough patience and time to solve the problems they encounter in different and creative ways. Therefore, instead of paper and pencil exercises, learning with relaxed manner and encouragement can foster students’ creativity better during the course of lesson.

Therefore, it is important for instructors to have professional development programs about 21st century learning and innovation skills(4Cs) to increase the effectiveness of their own styles of teaching practices. In fact, English learners have much to share regarding language and cultural knowledge that may help develop 21st Century Skills. In addition, 21st Century Skills can enhance the English learners’ language skills in their primary languages, as well as English. Using 21st century skills can help make difficult academic content concepts accessible to English learners before they acquire fluency in English.

In short, the Partnership for 21st Century Skills emphasizes communication, collaboration, creativity and critical thinking as the core competences. Erdoğan (2019) clearly sums up the importance of the implementation of 4Cs as:

If we need to improve these 4Cs of our students in accordance with the changes in demands for the global life, EFL classes are perfect places to improve the 4C skills integratedly with four language skills of reading, writing, listening and speaking. All four learning and innovation skills can be fitted into language teaching-learning process with an emphasis to enhance and promote these life skills of our students. As teachers, we can foster these skills of the students by creating opportunities and facilities and finding creative ways to discover themselves deeper and closer to make correct choices for a more successful future life in terms of education and workforce to catch up with the 21st century (p.123).

Eventually, as the students need the 21st learning and innovation skills (4Cs) to succeed in the new global economy, numerous educators and professionals have come to realize that they need to deal with process-based learning in order to implement “4Cs” into the class practices.

2.6. EFL Teachers Role on 21st Century Innovation Skills and Designing Encouraging Learning Environments

The explanations above prove that EFL teachers have a staminal role in using 4Cs in their classes. By the help of technology, the schoolmasters can procreate texts and explicate different cultural contexts by establishing relationships with their learners. For instance, language teachers can make use of authentic works so that the students can infer meanings for their own lives. In fact, EFL teachers need to develop a completely new range of English language teaching, which involves innovation skills (4Cs). To support this view, Chang and Tung (2009) contend, “teachers should suggest using project-based learning (PBL) to help students analyse problems, investigate possible solutions, make decisions, create designs, and solve problems”.

Indeed, English language teachers have a significant role to spend less time explaining through instruction and investing more time in experimental and error-tolerant modes of engagement in the teaching and learning process. To meet 21st century expectations, Kwek (2011) clearly states, “educators therefore need to depart from the ideas and pedagogies of yesterday and become bold advocates to develop the sorts of learning dispositions needed for our learners and their work futures”.

Reeves (2004) discusses the roles of teachers for their students’ future lives and the necessity of professional development programme for the improvement of their job proficiencies from “a destructive and unedifying force to a constructive and transformative force in education” (p.6). In addition, teachers have a great role in designing the subject areas and making the content meaningful to the students. For this point, Rosefsky and Opfer (2012) believe that teachers should make curriculum relevant to students’ lives. They contend, “learning should occur through the disciplines, including native and foreign languages, hard and social sciences, mathematics and the arts (...) the importance of thinking skills and simultaneous development of lower- and higher-order thinking skills in language teaching should be focused” (pp.5).

English language teachers' learning strategy instruction is also considered as an effective approach to teach 21st century innovation skills in the English language classrooms. Language teachers can promote their students' critical thinking through teaching them some learning strategies. In doing so, students can develop their metacognitive awareness towards learning a language. According to Reid (2000), "the best way to develop students' metacognitive skills is by making them consciously aware of the learning strategies they use when attempting different tasks".

The explanations above prove that teachers should construct positive attitudes towards their students, pedagogy and themselves as teachers. They should not only respect learners' individuality and listen to their opinions but also need to build mutual relationships with them. As Kabilan (2000) stresses, "teachers are the primary element needed to produce 21st century thinkers in language classrooms".

Moreover, Elsner (2011) maintains, "language learners need to be able to cope with different kinds of texts, including interactive, linear and nonlinear texts, texts with several meanings, texts being delivered on paper, screens, or live, and texts that comprise one or more semiotic systems". In this regard, Haut (2010) points out, "EFL teachers should not only incorporate different types of texts, they should also give explicit instruction detailing the inherent conventions so that students can learn to move between discourses and become both aware of the intrinsic features that are portrayed". As a support to this fact, EFL teachers need to coordinate their lessons well so that the students can familiarize with various texts by using task-based, project-based or content-based approaches in order to increase the level of understanding the target language, English (Heberle, 2010).

2.7. Chapter Summary

In this chapter, review of literature regarding to this study was presented. To start with, Turkish context of English as a foreign language was clarified. Next topic was about 21st century innovation skills in English language teaching and learning. Then, 21st century EFL teachers in Turkey was explained. Under this title, 21st century EFL teachers' profile, 21st century EFL teachers' education and 21st century innovation skills (4Cs) for EFL teachers was discussed. After that, implementing 21st century innovation skills (4Cs) in EFL classes was elaborated. Lastly, EFL teachers' role on 21st century innovation skills and designing encouraging learning environment were elaborated.

CHAPTER III

METHODOLOGY

3.1. Introduction

The purpose of this chapter is to explain the design and patterns of this research in relation to the rationale behind data collection and analysis procedures. On account of this, selection of the participants for the study, the preferred sampling method, context of the research, data collection procedures and data analysis tools were explained.

3.2. Research Design

The current research was designed based on explanatory sequential mixed method approach. Fraenkel, Wallen and Hyun (2012) explain that mixed-methods research design can be helpful for researchers to explain and clarify relationship among variables and examine them in detail. “Quantitative research uses a fixed design that organises in advance the research question and a detailed method of data collection and analysis” (Robson, 2007). A descriptive design involving a questionnaire will propose of the current attitude, knowledge and experience about the issue being investigated.

Certainly, “the research design of a study outlines the basic approach that researchers use to answer their research question” (Polit & Beck 2010). The researcher has tried to select the most suitable design for the study to achieve the objectives of the work.

An explanatory sequential design according to Creswell and Clark (2007) “consists of first collecting quantitative data and then collecting qualitative data to help explain or elaborate on the quantitative results”. The rationale for this approach is that the quantitative data and results provide a general picture of the research problem; more analysis, specifically through qualitative data collection is needed to refine, extend or explain the general picture. In other words, the second form of data arguments or supports the primary form of data. This research design can be illustrated as seen in figure 7:

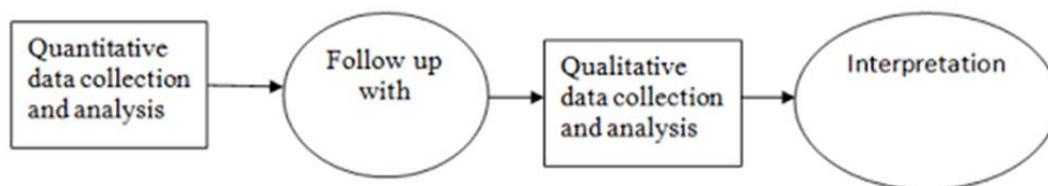


Figure 7. Explanatory Sequential Mixed Methods Design

Source: Creswell, J.W. (2012)

The purpose of this research is to describe and explain the framework for 21st century skills in English Language teaching and aids on describing teachers' beliefs and readiness about the pedagogical meanings and implications of the innovation skills in the field. It also tries to explain English language teachers' knowledge and understanding of 21st century skills in line with their attempts to promote and integrate these skills in the English language classroom. In the first phase of the study, a four-point Likert scale was used to collect quantitative data, which helped to rate to what extent Turkish EFL are ready for the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in their teachings.

In the second phase, semi structured face-to-face interviews were used to obtain qualitative data. The qualitative data were used to get more insights for clarifying and elaborating the quantitative data. In fact, qualitative and quantitative research in social sciences has gained popularity among researchers in the recent years. This is because of the fact that "research procedure keeps on advancing and evolving, and mixed methods is another progression forward, using the advantages of both qualitative and quantitative research" (Creswell, 2009). Overall, this study included the combination of quantitative and qualitative in order to provide a complete account of the research problem and, thus, enrich the study's conclusions.

3.3. Participants and Sampling

Participants of the quantitative phase of the research were Turkish EFL teachers who were actively teaching at different state schools in province of Adana, Turkey. The data were collected at 2019-2020 education year and 190 EFL teachers volunteered to participate in the study by completing scales, which consisted of 40 items in total. While choosing the participants, convenient sampling was used since it "is the least rigorous technique, involving the selection of the most accessible subjects" (Marshall, 1996, p.523).

Participants were described in terms of gender, age, grade level they work with, year of job experience and participation of a professional development programme. Tables 4, 5, 6, 7 describe the demographics about the participants in detail.

Table 4.

Gender Ratio of the Participants

Gender	Frequency	Percentage (%)
Male	65	34.2
Female	125	65.8
Total	190	100.0

Table 4 indicates that there were 65 males, which formed 34.2%, and there were 125 females, which formed 65.08% of all the participants completing survey items.

Table 5.

Age Ratio of the Participants

Age	Frequency	Percentage (%)
21-29 years	15	7.9
30-39 years	66	34.7
40-49 years	68	35.8
50-59 years	36	18.9
60-69 years	5	2.6
Total	190	100.0

It is seen that participants' ages ranged between 21-29 included 15 participants, which formed 7.9%, 30-39 included 66 participants which formed 34.7%, 40-49 included 68 participants which formed 35.8%, 50-59 included 36 participants which formed 18.9 %, and lastly 60-69 included 5 participants which formed 2.6% of all the participants.

Table 6.

The Distribution of Participants According to the Grade Level

School Level	Frequency	Percentage (%)
Primary	34	17.9
Middle	76	40.0
High	80	42.1
Total	190	100.0

Participants according to the grade level they are currently practicing their teaching skills were grouped as 34 primary school participants, which formed 17.9%, 76 middle school participants which formed 40.0% and 80 high school participants which formed 42.1% of all the participants.

Table 7.

The Distribution of Participants According to the year of Job Experience

Experience	Frequency	Percentage (%)
0-2 years	6	3.2
3-5 years	12	6.3
6-8 years	24	12.6
9-11 years	8	4.2
12-15 years	39	20.5
16-20 years	32	16.8
20+ years	69	36.3
Total	190	100.0

According to the year of job experience of EFL teachers, 0-2 year of experience included 6 participants which formed 3.2%, 3-5 year of experience included 12 participants which formed 6.3%, 6-8 year of experience included 24 participants which formed 12.6%, 9-11 year of experience included 8 participants which formed 4.2%, 12-15 year of experience included 39 participants which formed 20.5%, 16-20 year of experience included 32 participants which formed 16.8% and 20+ year of experience included 69 participants which formed 36.3% of the all participants.

Table 8.

The Distribution of Participants According to Attendance of any Professional Development Programme

Attendance of any Professional Development	Frequency	Percentage (%)
Yes	53	27.9
No	137	72.1
Total	190	100.0

Lastly, the participants who attended any professional development programme during last two years included 53 participants, which formed 27.9%, and the ones who did not attend any development programme included 137 participants, which formed 72.1% of all the participants.

For the second phase of the research, semi-structured interview was applied to focus on obtaining data through conversational communication. The researcher has interviewed 8 participants from 6 different state schools with the aim of enriching the data as much as possible. By this way, in-depth comprehension of the expressions provided by the participants has been aimed.

3.4. Research Context

This study was conducted in fall semester of 2019-2020 academic year with 190 Turkish EFL instructors at public schools in the district of Adana, Turkey. All the participants were voluntarily answered survey items of the questionnaire about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking). The application period lasted three months as all the participants who wanted to take part in the research were visited one by one at their own school environment for the sake of reaching them in their own locality. The duration of answering the survey items varied for each participant so the participants who wanted to have extra time to fill the questionnaire were visited twice to collect the completed versions. The difference of each participants' answering time of the survey items was not taken as a variable in this research because the main goal was to obtain the full questionnaire from the participants rather than focusing on the time.

3.5. Data Collection Tools

In this research, the quantitative data was collected through a questionnaire consisting of 40 items about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in one's teaching (see Appendix 1) adapted by Bedir (2019). The detailed questionnaire contains four main sections as communication and collaboration, creativity and innovation, critical thinking and problem solving and reflection and awareness. Under the title of communication and collaboration, there were questions about communicating clearly, collaborating with others and thinking interdependently. The subtitles of creativity and innovation were about thinking creatively, working creatively with others and applying past knowledge to new situations. Critical thinking and problem solving covered the subtitles of thinking critically, making judgments and decisions, asking questions and solving problems. The last part about reflection and awareness included sub-topics as metacognition (Thinking about Our Thinking) with reflecting and synthesizing.

The statistical analysis of the data gathered from the survey was made through SPSS. The four-point Likert scale was used preparing the questionnaire and the ranges were Always True =4, Usually True= 3, Sometimes True = 2 and Never True = 1 in order to realize the level of Turkish EFL teachers' perceptions, awareness and readiness about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in their teaching contexts.

The other data gathering instrument was semi-structured, face-to-face interview in order to “uncover and describe the meaning, structure and essence of the experiences from the participant's point of view” (Van Manen, 1990). The intended interview was conducted in a formal atmosphere between interviewer and the interviewee. The researcher previously prepared an interview guide with a set of questions to ask (See appendix 2). Although the scope of the interview was planned beforehand, interviewer let the interviewee answer the questions in a flexible manner so that he/she could give more profound data. According to Patton (2002), the aim of conducting an interview can be explained as follows:

The purpose of qualitative interviewing is to capture how those being interviewed view their world, to learn their terminology and judgments, and to capture the complexities of their individual perceptions and experiences. This openness distinguishes qualitative interviewing from the closed questionnaire or test used in quantitative studies. Such closed instruments force respondents to fit their knowledge, experiences, and feelings into the researcher's categories. The fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms (p. 348).

Before the process of interviewing started, the questions of interview were checked and revised by three professionals in the field so that the questions could fully explore the intended research areas and get answers to the research questions that were addressed at the beginning. Qualitative data collected from semi-structured interviews with free-response answers were analysed using "thematic analysis" (Merriam, 2009). The themes were checked by experts consisting of one professor and two lecturers in the relevant fields to ensure inter-rater reliability and data credibility was provided through review of the themes.

3.6. Procedure

The quantitative phase of the study was conducted in the fall term of 2019-2020 academic year and it lasted for three months to collect the completed questionnaires from 190 Turkish EFL teachers working at different state schools. Before the implementation of the survey, the researcher got the legal permission from MoNE in the province of Adana (See appendix 3) so that they could know about the study she was going to conduct and information gathered from the participants would be used in this research. For this purpose, she submitted a proposal to MoNE, which explains the objectives of the research, design to be followed, the participants, expected results and probable benefits and inclusions that can be arrived at from this specific research. The researcher provided MoNE with detailed proposal about how to maintain the privacy of research and refrain from violation of participants' personal rights. The study was confirmed, and the consent was given by MoNE.

Moreover, ethical considerations were specified and taken from the Ethical Committee of Çukurova University (See appendix 4) according to the principles of ethical considerations of Bell and Bryman (2007). During the implementation process, only voluntary participants' questionnaires were collected and they were to opt their

choice on a four-point Likert scale (Always True, Usually True, Sometimes True, and Never True).

The researcher herself visited the public schools and delivered the questionnaire in hand. This instrument was intentionally chosen as “a matter of asking a sample of people from a population a set of questions and using the answers from the population” (Fowler, 2014, p. ix) to investigate language teachers’ answers to the concepts of 21st Century Innovation Skills (4Cs) and its use in EFL the classrooms.

Upon completion of collecting the questionnaires from the participants, the quantitative data was analysed using SPSS, depending on the distribution of the variables as both total and part-by-part. As the results of the survey items had non-parametric distribution, Mann Whitney U test and *Kruskal Wallis H Test* were used for the analysis of the data.

Categorical data were illustrated as frequencies and percentages in order to enable large sums of data to be simplified, and mean was used to measure the center of a numerical data set in analysing significant expressions linked with 21st Century Innovation Skills (4Cs).

At the following phase of the research, semi-structures interviews were held with 8 willingly participated EFL teachers. Among these individuals, 2 of them work at primary school, 4 of them work at middle school and rest work at high school. There were 6 females and 2 males. Their ages range between 25-45 having an average of 12 years of job experience. Only 3 of them had a professional development program related to 21st Century Innovation Skills (4Cs). The interviews were held face-to-face during school visits and took approximately 30 to 45 minutes in average.

According to Patton (2002), “there is no single recipe or formula that exists for qualitative data analysis” (p. 432). However, thematic analysis might best suit to the objectives of this present study because the aim is to explain and demonstrate EFL teachers’ perceptions and awareness in terms of the 21st Century Innovation Skills (4Cs). The stages and the interpretation phase of this current study can be illustrated in figure 8:

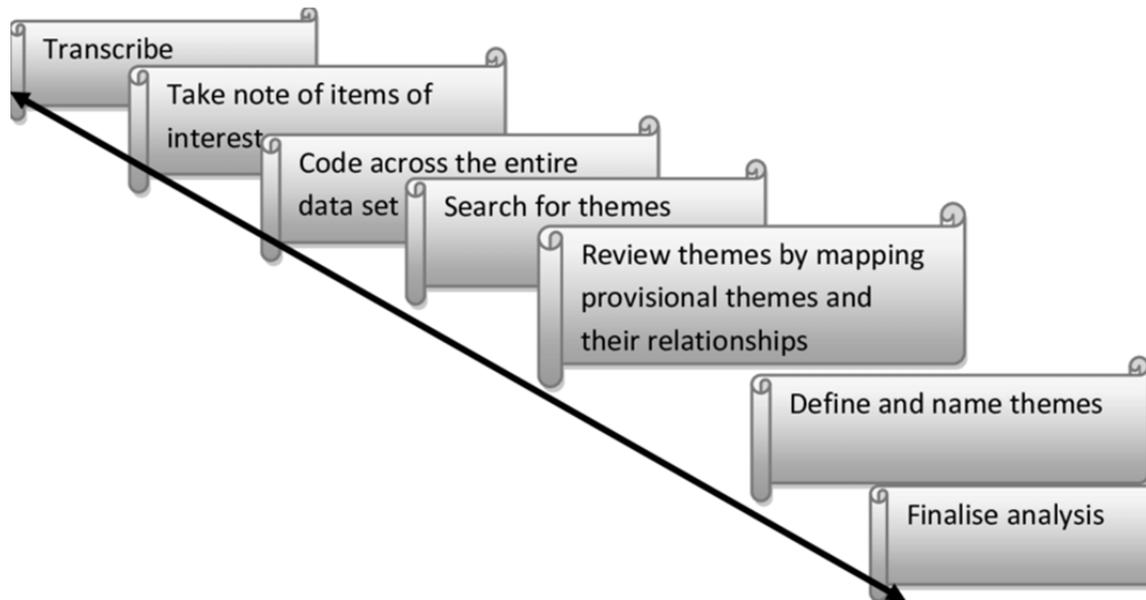


Figure 8. Steps in thematic analysis (Adapted from Braun and Clarke, 2013)

Source: <https://www.researchgate.net/>

In fact, the researcher assigned main attentions with significant topics that best illustrate the indispensable messages of the interview. In doing so, the identified themes were related to concepts for the data analysis. In relation to the research questions of the study, the most outstanding themes were elaborated to express the basic meanings and features. As Biggerstaff and Thompson (2008) point out, “the richness of the selected text and how the theme might inform other parts of an individual’s account must also be considered in data analysis” (p.12).

With this present work, the surveyor aimed to supply elaborate data about each stage of the research, the suppositions of the research, data gathering and processes of analysing the data.

3.7. Chapter Summary

In this chapter, the researcher explained the design of the study in detail by referring to the rationale behind data collection and analysis procedures. At this point, research design, participants and sampling, research context, data collection tools and the procedures to be followed both for quantitative and qualitative data were clarified.

CHAPTER IV

FINDINGS

4.1. Introduction

The aim of this current research was to uncover Turkish EFL teachers' perceptions and awareness about the 21st Century Innovation Skills (4Cs) in EFL contexts. With this purpose, this part elucidates the outcomes of the work specified by the research questions and explains the results obtained from both questionnaire and the semi-structured interview.

4.2. Analysis of the Quantitative Data

The data attained from the questionnaire about 21st century innovation skills (4Cs) was analysed via SPSS. First, the results are organized and discussed according to total scores of the participants. Then, the findings are presented according to five variables as gender, age, grade level, year of job experience and participation of a professional development programme under four main sections as communication and collaboration, creativity and innovation, critical thinking and problem solving and reflection and awareness. Under the title of communication and collaboration, there were questions about communicating clearly, collaborating with others and thinking interdependently. The subtitles of creativity and innovation were about thinking creatively, working creatively with others and applying past knowledge to new situations. Critical thinking and problem solving covered the subtitles of thinking critically, making judgments and decisions, asking questions and solving problems. The last part about reflection and awareness included sub-topics as metacognition (Thinking about Our Thinking) with reflecting and synthesizing.

4.2.1. Perceptions of Total Sample

There is a need to identify and describe 21st century innovation skills especially in the field of English Language Teaching and it is of vital importance that the dissertation of this proposal has implications for the teaching of English based on English Language teachers' insights. Therefore, according to the results of the analyses, the descriptive values related to the total score obtained from teachers' answers to the questionnaire

about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in their teaching and the scores obtained from the sub-dimensions of the scale have been presented in Table 9.

Table 9.

Descriptive values of teachers' 21st century skills survey scores

	CandCScore	CandInScore	CtandPsScore	RandAScore	Total Score
N	190	190	190	190	190
Mean	42.2947	38.3842	25.2316	23.3368	129.2474
Std. Deviation	6.57134	6.15366	3.99326	3.48272	17.77630
Minimum	18.00	14.00	12.00	13.00	70.00
Maximum	52.00	48.00	32.00	28.00	159.00
CandCScore	Communication and Collaboration				
CandInScore	Creativity and Innovation				
CtandPsScore	Critical Thinking and Problem Solving				
RandAScore	Reflection and Awareness				

When the minimum and maximum scores given in Table 9 and the minimum and maximum scores that can be obtained from the questionnaire are taken together, it is seen that teachers have a perception that they have 21st century skills to a great extent. This means that EFL teachers in this study tend to be aware of these skills and perceive themselves to be ready to use these innovation skills in their classes. When the sub-dimensions are analysed, it is clear that EFL teachers have the highest scores for communication and collaboration sub-dimension, which is followed by creativity and innovation, critical thinking and problem solving, lastly reflection and awareness.

4.2.2. Perceptions of EFL Teachers according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills

In line with the purposes of the research, the perceptions that teachers have for the 21st century survey scale were examined according to the gender variable and the results obtained by the Mann Whitney U test are given in Table 10.

Table 10.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender

Gender	N	Mean Rank	Sum of Ranks	U	p
Male	65	91.68	5959.00	3814.000	.489
Female	125	97.49	12186.00		

As table 10 is examined, it can be said that the average score obtained by female teachers from 21st century skills scale is higher than the average score of male teachers, however this difference is not significant ($U=3814.000$, $p>.05$). This means that female EFL teachers tend to perceive 21st century innovation skills with a higher degree of awareness when they are compared to males. Males are also open to use these skills and believe that 21st century skills are necessary for them to be effective in the teaching process.

The results of the analysis of whether the scores obtained from the teachers differ according to whether they received a professional development programme about 21st century innovation skills or not are presented in Table 11.

Table 11.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21st Century Innovation Skills or not

Professional Development	N	Mean Rank	Sum of Ranks	U	p
Yes	53	115.08	6099.00	2593.000	.002
No	137	87.93	12046.00		
Total	190				

When Table 11 is studied, teachers receiving a professional development programme about 21st century innovation skills ($X = 115.08$) have more positive perceptions about 21st century innovation skills (4Cs) when they are compared to the teachers not perceiving any professional development programme about 21st century innovation skills ($X=87.93$), and this difference is quite significant ($U=2593.000$, $p<.05$). In fact, the scores clearly prove that receiving a professional development program raise the level of EFL teachers' perceptions in a positive sense.

The perceptions that teachers have for the 21st century survey scale were examined according to grade level they work with and whether there is a significant difference or not according to the findings are presented in table 12.

Table 12.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with

School Level	N	Mean Rank	sd	X²	p
Primary	34	81.99	2	2.720	.254
Middle	76	100.61			
High	80	96.39			
Total	190				

When Table 12 is analysed, it is seen that mostly the teachers who work at the middle school level tend to have 21st century skills ($X = 100.61$), followed by the teachers working at the high school level ($X = 96.39$) and lastly the teachers at primary school level ($X = 81.99$). However, when it is analysed whether these scores differ significantly according to the school level they work with, this difference was not significant ($\chi^2 = 2.720$, $p > .05$). In other words, working with different school levels does not induce any meaningful differences about EFL teachers' perceptions on 21st century innovation skills.

Another variable addressed in the study is the age variable. The results of the analysis about the perceptions that teachers have for the 21st century survey scale were examined according to age and demonstrated in table 13.

Table 13.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age

Age	N	Mean Rank	sd	X²	p
21-29 years	15	124.80	4	5.163	.271
30-39 years	66	91.05			
40-49 years	68	92.01			
50-59 years	36	98.82			
60-69 years	5	90.00			
Total	190				

As shown in Table 13, as a result of the analysis, 21st century skills are most common among teachers aged 21-29 and teachers in the age range of 60-69 were found to have the lowest tendency to use 21st century innovation skills; however, it was concluded that this difference was not significant ($\chi^2 = 5.163, p > .05$). It can be easily deduced that age variable in the survey do not have any meaningful impact on the EFL teachers' perceptions about 21st century skills.

The results of the analysis about the perceptions that teachers have for the 21st century survey scale were examined according to year of job experience and Kruskal Wallis H Test Result are given in table 14.

Table 14.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience

Experience	N	Mean Rank	Sd	X²	p
0-2 years	6	92.33	6	7.494	.278
3-5 years	12	118.29			
6-8 years	24	84.88			
9-11 years	8	77.06			
12-15 years	39	92.53			
16-20 years	32	83.63			
20+ years	69	104.83			
Total	190				

As can be seen in Table 14, teachers with a maximum of 3-5 years and more than 20 years of job experience have tendency to use 21st century skills more than the teachers with at least 6-8 years and 16-20 years of job experience. However, as a result of the analysis, it was determined that the difference was not significant. It is true that EFL teachers tend to have varied scores and some seem to have higher points for their perceptions. Overall, EFL teachers in this research have similar understandings about 21st century skills.

4.3. Findings of Communication and Collaboration sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills

The scores that teachers got from the sub-dimension were examined within the scope of the independent variables based on the research and the results obtained according to the gender variable are demonstrated in table 15.

Table 15.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Communication and Collaboration sub-dimension

Gender	N	Mean Rank	Sum of Ranks	U	p
Male	65	91.68	5959.00	3814.000	.489
Female	125	97.49	12186.00		
Total	190				

When Table 15 is examined, it is clear that the communication and collaboration scores of teachers differ in favor of women according to gender ($X = 97.49$), but this difference is not significant ($U = 3814.000$, $p > .05$). Actually, both female and male teachers tend to have positive perceptions for this sub-dimension, but the scores of women are slightly higher than the scores of men in this survey.

The results of the analysis of these scores according to the professional development variable are given in Table 16.

Table 16.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21st Century Innovation Skills or not under the Communication and Collaboration sub-dimension

Professional Development	N	Mean Rank	Sum of Ranks	U	p
Yes	53	115.08	6099.00	2593.000	.002
No	137	87.93	12046.00		
Total	190				

When Table 16 is examined, it is seen that communication and collaboration scores of teachers differ according to their professional development program they received about 21st century innovation skills and this difference is in favor of the ones who participated a professional development program ($X=115.08$), which is significant in this research ($U=2593.000$, $p<.05$). Namely, having participated a professional development program about 4Cs cause significant differences for EFL teachers' perceptions and understandings of these skills.

The results of the analysis of whether the subskills under the subtitle of communication and collaboration differ according to the grade level they work with are showed in Table 17.

Table 17.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under the Communication and Collaboration sub-dimension

School Level	N	Mean Rank	sd	X²	p
Primary	34	81.99	2	2.74	.254
Middle	76	100.61			
High	80	96.39			
Total	190				

When Table 17 is examined, the communication and collaboration scores of teachers differ according to the education level they work with, it was determined that the teachers working at secondary education level mostly had these features ($X = 100.61$), but this difference was not significant ($X^2 = 2.74$, $p> .05$). This means that regardless of different school levels, EFL teachers in this study tend to have close scores for their perceptions about 4Cs.

The analysis results of the communication and collaboration scores of the teachers according to the age variable are explained in Table 18.

Table 18.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Communication and Collaboration sub-dimension

Age	N	Mean Rank	sd	X²	p
21-29 years	15	124.80	4	5.16	.271
30-39 years	66	91.05			
40-49 years	68	92.01			
50-59 years	36	98.82			
60-69 years	5	90.00			
Total	190				

As seen in Table 18, it was determined that mostly the teachers who are in the 21-29 age group have communication and collaboration scores. This is followed by teachers aged 50-59. The teachers with the lowest score in this sub-dimension are those who are in the 60-69 age range. Although the communication and collaboration scores of the teachers differ by age, it was determined that this difference was not significant as a result of the analysis ($X^2 = 5.163$, $p > .05$). In other words, EFL teachers tend to have close scores for their perceptions of 4Cs although they have different ages from each other.

Analysis results of these scores according to the year of job experience variable are presented in Table 19.

Table 19.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Communication and Collaboration sub-dimension

Experience	N	Mean Rank	sd	X²	p
0-2 years	6	92.33	6	7.49	.27
3-5 years	12	118.29			
6-8 years	24	84.88			
9-11 years	8	77.06			
12-15 years	39	92.53			
16-20 years	32	83.63			
20+ years	69	104.83			
Total	190				

As can be understood in Table 19, it has been determined that the teachers who have more than 20 years and 3-5 years of job experience in communication and collaboration sub-dimension get the highest points and the teachers who have 9-11 years of job experience have the lowest scores. However, as a result of the analysis, it was determined that this difference was not significant ($X^2 = 7.49$; $p > .05$). Therefore, the scores of this sub-dimension clarified that the variable about the years of job experience EFL teachers have do not lead to any meaningful alterations for their perceptions of 21st century skills.

4.4. The analysis of the scores EFL Teachers got from the Creativity and Innovation sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills

The scores EFL Teachers got from the creativity and innovation subscale of the survey were examined within the scope of the independent variables based on the research and the results obtained according to the gender variable are shown in table 20.

Table 20.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Creativity and Innovation sub-dimension

Gender	N	Mean Rank	Sum of Ranks	U	p
Male	65	91.15	5925.00	3780.000	.431
Female	125	97.76	12220.00		
Total	190				

Table 20 shows that creativity and innovation scores of teachers differ in favor of women according to gender ($X = 97.76$), but this difference is not significant ($U=3780.000$, $p > .05$). Just like in the previous sub-dimension, female teachers have more positive perceptions and understanding of 4Cs, but this does not mean that male teachers' scores are too low. In fact, both gender groups have close scores about 21st century innovation skills.

The results of the analysis of these scores according to the professional development variable are shared in Table 21.

Table 21.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21st Century Innovation Skills or not under the Creativity and Innovation sub-dimension

Professional Development	N	Mean Rank	Sum of Ranks	U	p
Yes	53	117.41	6222.50	2469.500	.001
No	137	87.03	11922.50		
Total	190				

Table 21 illustrates that creativity and innovation scores of teachers differ according to their professional education they received about *21st Century Innovation Skills* and this difference is in favor of the ones who participated a professional development program ($X = 117.41$), which is significant in this current research ($U = 2469.500$, $p < .05$). As is the previous sub-dimension, receiving a professional development program for 21st century innovation skills have enabled EFL teachers to have higher scores about their level of understanding these skills when they are compared to teachers nor having any professional development program.

The results of the analysis of whether the subskills under the subtitle of creativity and innovation differ according to the grade level they work with are examined in Table 22.

Table 22.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under the Creativity and Innovation sub-dimension

School Level	N	Mean Rank	sd	X ²	p
Primary	34	91.09	2	.389	.823
Middle	76	98.03			
High	80	94.97			
Total	190				

As understood from Table 22, it was determined that the creativity and innovation scores of the teachers differed according to the grade level they work with, and the teachers who worked at middle school level mostly had a tendency to use 21st century innovation skills ($X = 98.03$), but this difference is not significant ($X^2 = .389$, $p > .05$). In a way, the scores that the EFL teachers have under this sub-dimension proves the fact working at different school levels does not lead to any meaningful changes about the way that teachers think regarding to 21st century innovation skills.

The analysis results regarding the creativity and innovation scores of the teachers according to the age variable are elucidated in Table 23.

Table - 23.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Creativity and Innovation sub-dimension

Age	N	Mean Rank	sd	X²	p
21-29 years	15	120.47	4	8.402	.078
30-39 years	66	88.29			
40-49 years	68	91.77			
50-59 years	36	109.53			
60-69 years	5	65.50			
Total	190				

Table 23 proves that the teachers who are in the 21-29 age range have the highest creativity and innovation scores, followed by the teachers in the 50-59 age range. The teachers with the lowest score in this sub-dimension are those who are in the 60-69 age range. Although the creativity and innovation scores of teachers differ by age, it was determined that this difference was not significant as a result of the analysis ($X^2 = 8.402$, $p > .05$).

Analysis results of these scores according to the year of job experience variable are indicated in Table 24.

Table 24.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Creativity and Innovation sub-dimension

Experience	N	Mean Rank	sd	X²	p
0-2 years	6	102.17	6	6.473	.372
3-5 years	12	98.71			
6-8 years	24	82.33			
9-11 years	8	85.81			
12-15 years	39	86.06			
16-20 years	32	90.84			
20+ years	69	107.56			
Total	190				

As can be verified in Table 24, teachers with a maximum of 0-2 years and more than 20 years of job experience have tendency to use 21st century skills more than the teachers with at least 6-8 years and 16-20 years of job experience. However, as a result of the analysis, it was determined that the difference was not significant. In other words, in spite of minor differences about EFL teachers' perceptions on 4Cs, teachers in this study tend to have similar scores about the issue under investigation.

4.5. Findings of Critical Thinking and Problem Solving sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills

The scores that teachers got from the critical thinking and problem solving sub-dimension were examined within the scope of the independent variables based on the research and the results obtained according to the gender variable are displayed in Table 25.

Table 25.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Critical Thinking and Problem Solving sub-dimension

Gender	N	Mean Rank	Sum of Ranks	U	p
Male	65	97.08	6310.50	3959.50	.77
Female	125	94.68	11834.50		
Total	190				

Table 25 represents that critical thinking and problem solving scores of teachers differ in favor of women according to gender ($X = 97.08$) but this difference is not significant ($U = 3959.50$, $p > .05$). In fact, these scores prove that gender difference may have minor role on EFL teachers' perceptions about 21st century skills, but both females and males tend to perceive 4Cs positively.

The results of the analysis of these scores according to whether receiving any professional development program about 21st century skills or not variable are shown in Table 26.

Table 26.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21st Century Innovation Skills or not under the Critical Thinking and Problem Solving sub-dimension

Professional Development	N	Mean Rank	Sum of Ranks	U	p
Yes	53	112.05	5938.50	2753.50	.010
No	137	89.10	12206.50		
Total	190				

When Table 26 is ventilated, it is seen that critical thinking and problem solving scores of teachers differ according to whether they received any professional development program about 21st century skills, this difference is in favor of the ones who participated this program ($X = 112.05$) and is significant ($U = 2753.50$, $p < .05$). Therefore, receiving a professional development program plays an outstanding role on EFL teachers' perceptions about 4Cs.

The results of the analysis on whether the critical thinking and problem solving features differ according to the grade level they work with are analyzed in Table 27.

Table 27.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under Critical Thinking and Problem Solving sub-dimension

School Level	N	Mean Rank	sd	X²	p
Primary	34	86.69	2	3.79	.15
Middle	76	104.84			
High	80	90.37			
Total	190				

As table 27 is noticed, it was determined that EFL teachers' scores about the critical thinking and problem solving skills differ according to the level of education they work at, and mostly the teachers who work at middle school level have these features ($X = 104.84$), but this difference is not significant ($X^2 = 3.79$, $p > .05$). This means that working at different school levels do not have a significant impact on EFL teachers' perceptions and understandings about the items in the survey.

Analysis results of teachers' critical thinking and problem solving scores by age variable are shared in Table 28.

Table 28.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Critical Thinking and Problem Solving sub-dimension

Age	N	Mean Rank	sd	X²	p
21-29 years	15	107.00	4	4.52	.34
30-39 years	66	84.92			
40-49 years	68	98.39			
50-59 years	36	105.36			
60-69 years	5	90.30			
Total	190				

As can be comprehended in Table 28, the teachers who are between the ages of 21-29 ($X = 107.00$) have the highest critical thinking and problem solving scores. This

is followed by teachers aged 50-59. The teachers with the lowest score in this sub-dimension are those who are in the 30-39 age range ($X = 84.92$). Although the critical thinking and problem solving scores of teachers differ according to age, it was determined in the analysis that this difference was not significant ($X^2 = 4.52, p > .05$).

The analysis results of these scores according to the year of job experience variable are demonstrated in Table 29.

Table 29.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under the Critical Thinking and Problem Solving sub-dimension

Experience	N	Mean Rank	sd	X²	p
0-2 years	6	91.17	6	8.89	.17
3-5 years	12	94.42			
6-8 years	24	84.38			
9-11 years	8	80.94			
12-15 years	39	86.62			
16-20 years	32	86.47			
20+ years	69	110.83			
Total	190				

Table 29 clarifies that critical thinking and problem solving skills were scored by teachers with more than 20 years of job experience with highest rate ($X = 110.83$) and teachers with 9-11 years of job experience had the lowest scores ($X = 80.94$). However, as a result of the analysis, it was observed that the difference was not significant ($X^2 = 8.89, p > .05$).

4.6. Findings of Reflection and Awareness sub-dimension of the survey according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills

The scores that teachers got from the reflection and awareness sub-dimension were examined within the scope of the independent variables based on the research and the results obtained according to the gender variable are expressed in Table 30.

Table 30.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Gender under the Reflection and Awareness sub-dimension

Gender	N	Mean Rank	Sum of Ranks	U	p
Male	65	91.54	5950.00	3805.00	.47
Female	125	97.56	12195.00		
Total	190				

The analysis of table 30 shows that teachers' reflection and awareness scores differ in favour of women according to gender ($X = 97.56$), but this difference is not significant ($U = 3805.00$, $p > .05$). This result underlines the fact that gender difference does not create any meaningful variation about EFL teachers' perceptions on 21st century skills.

The results of the analysis of these scores according to variable of whether they received a professional development programme about 21st century innovation skills or not the professional development are reported in Table 31.

Table 31.

Mann Whitney U-Test Result of Teachers' Survey Scores According to Whether They Received a Professional Development Programme about 21st Century Innovation Skills or not under the Reflection and Awareness sub-dimension

Professional Development	N	Mean Rank	Sum of Ranks	U	p
Yes	53	102.16	5414.50	3277.50	.29
No	137	92.92	12730.50		
Total	190				

When Table 31 is studied, it can be seen that the reflection and awareness scores of teachers differ according to whether they received a professional development programme about 21st century innovation skills or not, and this difference is in favor of the ones who received this program ($X = 102.16$) but this difference is not significant ($U = 3277.50$, $p > .05$). This time, unlike the previous results regarding to receiving a professional development program, EFL teachers have similar perceptions about 4Cs under this sub-dimension.

The results of the analysis on whether the reflection and awareness scores differ according to the grade level of they work with are illustrated in Table 32.

Table 32.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Grade Level They Work with under the Reflection and Awareness sub-dimension

School Level	N	Mean Rank	sd	X²	p
Primary	34	84.04	2	2.89	.23
Middle	76	102.67			
High	80	93.56			
Total	190				

Table 32 determines that the reflection and awareness scores of the teachers differ according to the education level they work at, and the teachers who work at the middle school level have the highest scores ($X = 102.67$), but this difference is not significant ($X^2 = 2.89, p > .05$).

The results of the analysis regarding the reflection and awareness scores of the teachers according to the age variable are notified in Table 33.

Table 33.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Age under the Reflection and Awareness sub-dimension

Age	N	Mean Rank	sd	X²	p
21-29 years	15	109.80	4	4.38	.35
30-39 years	66	84.98			
40-49 years	68	100.21			
50-59 years	36	100.86			
60-69 years	5	88.80			
Total	190				

As perceived in Table 33, it was determined that the teachers who are in the 21-29 age range have the highest reflection and awareness scores ($X = 109.80$). This is followed by teachers aged 50-59 and 40-49. The teachers with the lowest score in this

sub-dimension are those who are in the 30-39 age range ($X = 84.98$). Although teachers' reflection and awareness scores differ according to age, it was determined that this difference was not significant as a result of the analysis ($X^2 = 4.38, p > .05$).

The analysis results of these scores according to the year of job experience variable are asserted in Table 34.

Table 34.

Kruskal Wallis H Test Result of Teachers' Survey Scores According to Year of Job Experience under Reflection and Awareness sub-dimension

Experience	N	Mean Rank	sd	X²	p
0-2 years	6	81.50	6	8.65	.19
3-5 years	12	96.13			
6-8 years	24	83.00			
9-11 years	8	63.75			
12-15 years	39	89.97			
16-20 years	32	93.91			
20+ years	69	108.50			
Total	190				

Table 34 shows that the teachers who have more than 20 years of job experience ($X = 108.50$) have the highest scores and the teachers with 9-11 years of job experience ($X = 63.75$) have the lowest points. However, as a result of the analysis, it was observed that the difference was not significant ($X^2 = 8.65, p > .05$).

4.7. Analysis of the Qualitative Data

The datum provided from face-to-face semi-structured interviews was analyzed to reach the responses about how EFL teachers perceived the implementation of 21st century innovation skills (4Cs). The researcher carried out the interviews after applying the questionnaires so that she could understand what they think about 4Cs in depth. The interviews were semi-structured because the researcher wanted the teachers answer the questions in the way they wanted. Data supplied from open-ended questions were analyzed through open thematic analysis and the quotations were chosen to support the findings. Prior to data analysis, audio recordings of the interviews were transcribed. The

researcher herself made the transcriptions to be familiar with the data. Then, the participants' answers to the open-ended questions about the implementation of 21st century innovation skills (4Cs) in class were listed. The opinions of the participants were given through the transferred their names to the codes. Accordingly, the names of the Turkish teachers who involved in the interviews were encoded with the letter of the A and the various code numbers were given to the each of them (Participant 1=A1).

It is worth explaining that the interview questions in the current study covered the participants' perceptions with regard to defining 21st century learning and innovation skills (question 1), their perceptions with regard to their views about Communication and Collaboration (question 2), their perceptions about Creativity and Innovation (question 3), their perceptions about Critical Thinking and Problem Solving (question 4), and their perceptions about Reflection and Awareness (question 5).

Moreover, the interview included the participants' perceptions with regard to their thoughts whether these skills are effective in language learning/teaching (question 6), their perceptions with regard to describing a specific activity or strategy used in their classroom that addresses these skills (question 7), their perceptions with regard to providing any additional comments you may have about 21st learning and innovation skills (question 8), and their perceptions with regard to their intentions to integrate 4Cs (Communication, collaboration, critical thinking and creativity) into their lessons (question 9). Finally, the researcher asked them whether they wanted to add anything further about 21st Century Learning and innovation skills and its implementation to EFL classes.

After transcribing the interview, the researcher firstly went through the participants' answers in order to familiarize with the data under the light of previously decided topics, which were creative thinking, communication, collaboration and critical thinking. In the second phase, noting brief descriptions and explanations of the participants in relation to specific topics stated in advance were provided. In the third stage, the researcher sorted topics and codes into themes, which requires active interpretation of the data. Next, the themes were reviewed and refined in order to see whether the codes support themes. Then, the themes were named and described in relation to the research questions by providing the messages that the themes tell. Finally, the researcher provided a description of themes and participants' background in table 35.

Table 35.

The participants and their perceptions (A1, A2, A3, A4)

	A1	A2	A3	A4
Background	Female, Age 34 Primary, 10 years of experience, Having no Professional development	Female, Age 42 Middle, 12 years of experience, Having no Professional development	Male, Age 31 Primary, 9 years of experience, Having Professional development	Female, Age 38 Middle, 11 years of experience, Having Professional development
Perceptions on 21st century learning and innovation skills (4Cs)	Useful, Necessary for teachers in this age	Good, Improves problem solving skills	Effective, Helps understanding better	Provides active learning & increases motivation
Perceptions on Communication & Collaboration	Maximizes sharing responsibility & togetherness	Encourages group works & team study	Provides a shared goal & an attempt to reach the goal	Supplies team- based learning & peer assistance
Perceptions on Creativity & Innovation	Increases imagination & positive thinking	Fosters imagination & creativity	Enables original ideas & thoughts	Supports imagination & different views
Perceptions on Critical Thinking & Problem Solving	Higher order skills & represents analysis	Making inferences & planning oneself	Necessary for success & self- regulation	Analyzing & interpreting problems better
Perceptions on Reflection and Awareness	Evaluating the problems better	Developing better plans to be successful	Reaching better level of thinking	Making connections & understanding better
Perceptions about 4Cs in language learning/teaching, activities/strategies to be used	Difficult to implement & requires much time	Hard to succeed with crowded classes	Useful & necessary to be successful	Requires time and preparation but useful
Additional comments with regard to 21st skills & its integration of 4Cs into classes.	Hard to implement & requires training	Lack of technology to implement it	Effective & necessary for all EFL teachers	Requires technology support and time

Table 35

Continuation of the participants and their perceptions (A5, A6, A7, A8)

	A5	A6	A7	A8
Background	Female, Age 37 High School , 10 years of experience, Having no Professional development	Male, Age 33 Middle, 8 years of experience, Having no Professional development	Female, Age 41 High School, 12 years of experience, Having Professional development	Female, Age 29 Middle, 6 years of experience, Having no Professional development
Perceptions on 21st century learning and innovation skills (4Cs)	Effective for preparing students for future	Improves thinking & problem solving skills	Students are at center & fosters individual efforts for learning	Provides positive learning environments and opportunities
Perceptions on Communication & Collaboration	Provides effective listening and communication	Encourages students to communicate & study together	Provides positive group work atmosphere & communication	Gives students chances to work together for a common goal
Perceptions on Creativity & Innovation	Encourages students to state their ideas in a relaxed manner	Fosters unique ideas & supports imagination	Gives students courage to explore & state original ideas	Supports imagination & develops new ways of thinking
Perceptions on Critical Thinking & Problem Solving	Requires interpretation & analysis of new ideas	Vital for students & helps active learning	Fosters cognitive skills & helps students create new ideas	Fosters analyzing & evaluating new problems with new solutions
Perceptions on Reflection and Awareness	Evaluating new situations with new solutions	Communicating effectively in new situations	Having better understanding with new problems	Communicating and evaluating the situations better
Perceptions about 4Cs in language learning/teaching, activities/strategies to be used	Not so easy & requires much time and effort to succeed	Hard to implement in all age levels & crowded classes	Hard but not impossible & requires much time, effort and preparation	Useful but hard to implement in all classes
Additional comments with regard to 21st skills & its integration of 4Cs into classes.	Difficult to implement & requires time	Not easy without technology	Activates students & necessary for this era	Requires technology and time to be effective

As a result of thematic analysis, the findings were indicated and explained under seven titles: Teachers' perceptions on 21st century learning and innovation skills (4Cs), their perceptions on Communication and Collaboration, their perceptions on Creativity and Innovation, their perceptions on Critical Thinking and Problem Solving, and their perceptions on Reflection and Awareness. Other two titles are related to their perceptions about 4Cs in language learning/teaching, activities/strategies to be used, additional comments with regard to 21st learning and innovation skills, and its integration of 4Cs into classes.

4.7.1. Analysis of Teachers' Perceptions on 21st century learning and Innovation Skills (4Cs)

Concerning teachers' opinions about 21st century learning and Innovation Skills (4Cs), all the participants indicate positive statements about the issue under investigation. The decomposition of the data indicated that nearly all teachers involved in the interview accepted 21st century learning and innovation skills necessary and useful for teaching. Especially, the teachers (A3, A7) having professional development programme about 21st century innovation skills (4Cs) are found to have outstanding explanations with their teaching practice.

A3: For me, an EFL teacher should, without questioning, have the ability to use 21st century skills in his/her classes. As being a teacher of foreign language, I strongly believe that these skills help my students learn better. The skills make the lessons be more effective and enjoyable.

A7: Firstly, I need to state that students are always at the center of teaching, which requires teachers to be well prepared for the classes. In this technological era, teachers with the use of 21st century skills in the classes fosters students' learning and help the students understand the lesson easier.

The teachers having no professional development about the issue still have positive explanation about 21st century learning and innovation skills. Regardless of their gender, age, year of job experience or the grade level they work with, they agree on the positive contributions of using 4Cs in the classes. Similarly, other teachers were reflecting the significance of 21st century skills:

A2: We should follow up with time. This means that we as teachers should improve ourselves to be useful for our students. If we want to support our students' problem solving skills, we as teachers should make use of this skills.

A5: We cannot live with the past routines. We should prepare both our students and ourselves for future. At this point, the teachers using 21st century skills can make difference in their students' lives.

In short, the participants had tendency to have a consensus on the importance of 21st century learning and innovation skills. They seemed to agree that EFL teachers should make use of these skills to make their teaching effective and useful. Their comments focused on the fact that 21st century skills provide positive learning environments and unique opportunities for students in this new era.

4.7.2. Analysis of Teachers' Perceptions on Communication and Collaboration

There is no doubt that EFL teachers focused on mostly pair work, group work or team work under the sub-dimension of communication and collaboration. First, the analysis of their answers indicated that communication and collaboration are fundamental life skills that EFL teachers should make use of in their classes so that the students can connect with each other and work well in their future.

A8: We cannot see our students as isolated individuals. They live in the same classroom with us. If we want to achieve a common goal, we as teachers should encourage them to work together.

A2: Collaboration is important for each of us. At a school, a teacher cannot say I do not need any other teacher to increase my students' success. It is same for students. When they become adults, they will need to cooperate with others with their jobs. We should teach them how to cooperate with other rather than rejecting to work with others.

A5: As a teacher, it is crucial that you encourage students to study with their peer together. In the past, we tried to accomplish our goals on our own, but now we need others to be successful. In the future, our students will need accomplish in teams, and in many cases, global teams.

It is true that it is not always easy to teach how to collaborate with others effectively. There should be respect and willingness for positive communication with other beings. As the excerpts below show, the teachers underline the importance of special care for an effective communication and collaboration.

A3: Teaching to work in collaboration with others requires a teacher to know how to communicate well. Without understanding the others, you cannot build a common goal and work together in a harmony. Well, I know that I should design my classes where students have the opportunity to be learners actively working together on a specific learning objective. It is sometimes hard to succeed in crowded classes, but still it is worth trying it.

A7: As a teacher, I believe that I should be a model for my students. First, I should know how to work with my students. If I ignore their needs, I cannot make my lesson effective. I should create a positive learning atmosphere where I can encourage them to work as a group to reach a shared objective.

The communication and collaboration sub-dimension under the title of 21st century innovation skills (4Cs) provides benefits not only for teachers but also for students as the participants clearly pointed out. It is not always easy to operate this sub-dimension in the class environment, but the teachers add that they need to develop themselves more to increase the effectiveness of their teaching skills.

4.7.3. Analysis of Teachers' Perceptions on Creativity and Innovation

The teachers involved in the interview generally emphasized the words imagination, original ideas and creativity under creativity and innovation sub-dimension. The teachers reflected that the students need to be taught differently and supported to indicate their ideas freely unlike in the past. In fact, the participants think that EFL teachers should encourage their learners to explore novel opinions and develop new ways of thinking. The teachers frankly express their thoughts as follows:

A2: In this age, what is important is new ideas and applications. Creativity is important for both teachers and students because without it they just repeat themselves. Successful teachers should have innovative skills to develop their students and prepare them for the future.

A1: I think creativity and innovation is related with imagination and new ideas. Innovative teachers should design the lesson with different, non-traditional exercises so that the students can improve new ways of thinking. That is, fostering creativity and imagination is very important for making our teaching be effective.

A4: For me, creativity and innovation means supporting students' imagination with new ideas. If our students gain different views about a topic, they can then think differently and create original ideas.

A3: Well, a teacher should develop himself/herself to improve his/her students. At this point, EFL teachers should make use of creative activities and exercises to improve their students' wish to learn different viewpoints.

The participants in this study agree on the significance of creativity and innovation sub-dimension and articulated the need to develop themselves as professionals in teaching. Their answers proved the need for a professional development program for teachers to improve themselves and develop their teaching practices. Moreover, regardless of their gender, age, year of job experience or the grade level they work with, they agree on the fact that they need to develop their 21st century skills under creativity and innovation sub-dimension. It can be said that teachers receiving a professional development perceive themselves as using these skills more in their classes and strongly believe that these skills make the lessons be more effective.

4.7.4. Analysis of Teachers' Perceptions on Critical Thinking and Problem Solving

The data analysis uncovered the fact that participants enunciated demand regarding to 21st century innovation skills referring to the problem solving and critical thinking sub-dimension. Teachers underline that knowing about the critical thinking skills is vital for students in today's world. Indeed, the effectiveness of teaching a language can be increased with the help of critical thinking skills because learning critical thinking can help students to develop other skills, such as a higher level of concentration and analytical capabilities. Moreover, the participants stress that problem-

solving skills relieve both the teachers and the students when they face a problem or a difficult situation with possible and different innovative solutions. Some of the teachers' expressions are listed below:

A6: Well, indeed problem solving skills are vital because these skills help us to cope with the problems better. By the help of it, we can produce new solutions, look at the problems from different windows and make our lessons more active and effective.

A7: I think, as a teacher, we should foster our students' cognitive skills. Thus, problem-solving skills are necessary for teachers to overcome the problems they face in the classroom and develop different viewpoints about an issue.

A3: Problem-solving skills helps teachers regulate themselves and be prepared for the circumstances in the classes. If a teacher wants to be successful at his/her teaching, he/she first should know how to handle with unexpected situations and solve the problems without losing his/her tension.

A2: To be honest I know that I should always be ready for my students' unexpected needs and questions. I always make plans before my lessons but those plans sometimes do not work at the time of teaching. I should be spontaneous to overcome the problems with quick and creative decisions. Thus, problem-solving skills are necessary for all of us as teachers.

The participants, quite enough, state the positive contributions of problem solving skills to their teaching practices. In fact, they all clearly expressed the importance of problems solving skills and they need to develop how to use these skills in order increase the effectiveness of their teaching. Contributors in the research state alike opinions in terms of problem-solving and critical thinking skills and many of them accept these skills are necessary for both their students and themselves.

4.7.5. Analysis of Teachers' Perceptions on Reflection and Awareness

The data analysis of reflection and awareness sub-dimension shows that the participants tend to perceive this sub-skill as dealing with problems and finding new solutions to them. More importantly, they commented on reflection and awareness as understanding a situation better and making connections among the topics. The following statements indicate that the participators who received a professional

development programme (A3, A7) about 21st century skills (4Cs) did have a clear idea about reflection and awareness sub-dimension.

A3: For me, reflection and awareness means reaching better level of thinking at your teaching. This means I know what to use, when to use, how to use, why to use to make my teaching effective and attract my students' attention throughout the lesson.

A7: 12 years of my teaching experience showed me I should know my strengths and weaknesses as a teacher and need to develop my weak points. By the help of reflection, I can say that I now have a better understanding with new problems I face during my teaching. What is important is that you should always be open to changes and willing to develop yourself in order to improve your students.

The rest of the participants not receiving a professional development programme about 21st century skills (4Cs) clearly expressed that reflection and awareness sub-dimension are related with evaluating the problems better, developing better plans to be successful and communicating effectively in new situations. However, they stressed that they wanted to get training and professional help in terms of reflection and awareness sub-dimension more deeply.

A2: I sometimes ask myself what else I can do to improve the effectiveness of my teaching and I see that making plans about the lessons and organising the activities beforehand would increase the effectiveness. If my plans does not work, I then change my decisions and re-organise my lessons to meet my students 'needs.

A4: I generally have nice time with my students, but sometimes they are bored and do not want to participate in the lesson. Then I generally change the flow of the lesson and start doing something enjoyable to raise their attention. Therefore, for me reflection means you know yourself and your students with e better level of thinking.

A5: A successful teacher should understand his/her students. This means an effective teaching is not only making them learn the subject matter, but the other skills they will need in the future. Well, I am trying to do my best but I still need to develop myself more.

In this regard, the answers given by the teachers deserve attention, because they are aware that they need to develop themselves to increase the quality of their teaching.

4.7.6. Analysis of Teachers' Perceptions about 4Cs in Language Learning Teaching Activities and Strategies to be used

Teachers' answers about 4Cs in language learning/teaching activities and strategies to be used were also analysed. They all agree that 4Cs has gained more and more significance recently and it has become a concern for almost all of EFL teachers who want to improve and raise the quality of their teaching. Thus, the participants stressed that integrating 4Cs to class activities are efficient and beneficial especially in terms of student learning processes. The interviewees, without any hesitation, think that think 21st century skills should be given more space in the curriculum and the books should support these skills with versatile activities. They add that speaking activities can be used as extracurricular activities to improve these skills.

Although the teachers know the benefits of using 4Cs in language learning, teaching activities and strategies, they state that it is difficult to implement these skills in crowded classes and it requires much time. The following excerpts clearly indicate the teachers' opinions about 4Cs in language learning/teaching activities and strategies:

A1: Yes. I try to encourage my students participate in the lessons feely. I make use of role-plays and drama to increase their interest and way of perceiving. Peer-work and group work are also contributed their development of 21st century skills, but I have difficulties in crowded classes. I cannot do what I plan before the lesson and sometimes I do not have enough time to do what I want.

A5: Well.... yes...to some extent 4Cs enable us to improve our students' learning skills. In some units, there are situations in which the students imagine themselves and decide what to do. Sometimes I use some extra-curricular activities to improve my students' thinking skills. However, it is not so easy to implement these skills in all classes because it requires much time and effort to succeed them in crowded classes.

A8: I agree that 21st century skills are useful for our classes, but it is hard to implement in all classes. For instance, I work with young learners and my classes are composed of 35 students. For me, it is hard to use these skills in my classes.

Two of the participants (A3, A7) have received a professional development programme about 21st century skills (4Cs) and when compared the other interviewees, they do not believe that it impossible to implement these skills in crowded classes. They highlight the importance of using 21st century skills in the classes and add that it is possible for teachers to use these skills with any age group is spite of some difficulties. The expressions of A3 and A7 reveal their explanations:

A3: I think a teacher, in our era, can be successful and effective only when he/she catches up the time. For a teacher, using 4Cs in the classes requires time and effort, but the outcomes of using these innovation skills are worth using.

A7: I do not have problems using different activities and strategies along with the 21st century skills, because using these skills are highly necessary in today's world. I am a teacher who is open to use new activities and strategies to help my students catch up with the time.

These reports show that the participants wish to instruct English interactively and communicatively with regard to 21st century skills although many of them say that it impossible to implement these skills in crowded classes.

4.7.7. Analysis of Additional Comments with Regard to 21st Learning and Innovation Skills, and its Integration of 4Cs into Classes

The last analysis covered additional comments with regard to 21st learning and innovation skills, and its integration of 4Cs into classes. The participants admit that it is challenging to implement 21st century skills in classes with lack of technology, time and training. In fact, the statements of the participants verified that 21st century skills directly associated with the use technology. As the excerpts below indicate, they explained their concerns about the issue:

A2: I want to use 4Cs in all my classes but there is lack of technology in my classes. For example, I want to create something new with my students but we do not have computers and internet.

A4: Well, if I have technological support, it would be easier to implement 21st century skills in my lessons. Sometimes, I need internet access in the lesson but I cannot do what I want.

A6: Besides having crowded classes, I do not have technology support for my lessons. For communication worldwide and creativity, I need internet access. I know lack of technology does not mean you cannot use these skills in the classroom, but still technology makes it easier to implement 21st century skills in the lessons.

The participants (A3, A7) who have received a professional development programme about 21st century skills (4Cs) do not relate the use 21st century skills to technology. These two participants explained that these skills are effective and necessary for all EFL teachers. Moreover, they add that these skills activate students' learning processes. The following excerpts supports their thoughts:

A3: Now, it is time to use these skills in the classes instead of traditional methods. For instance, an EFL teacher cannot be successful if he/she cannot make his/her students communicate, collaborate, create or think critically in the target language they are to learn. For me, teachers should improve themselves to develop their students.

A7: Teaching English is not same as in the past. Today, teachers cannot be successful by only explaining the rules of the target language. Students need different skills along with learning a language to be successful in the future. Therefore, a teacher should know 21st century skills, which are necessary for this era, to raise the effectiveness of their teaching.

Data analysis showed the participants' thoughts about the implementation of 4Cs in their teaching practices. Indeed, most of the participants talked in this research strongly emphasized the urgency of using 21st century skills in English. These narrations above highlighted the significance of 21st century learning and innovation skills in language teaching and the need to have professional development on the issue.

4.8. Chapter Summary

In this chapter, the analysis of the findings was demonstrated about Turkish EFL teachers' perceptions and awareness about the 21st Century Innovation Skills (4Cs) in EFL contexts. Therefore, this part elucidated the outcomes of the work directed with the research questions and explored the results obtained from both questionnaire and the semi-structured interview.

CHAPTER V

DISCUSSION

5.1. Introduction

In this chapter, the results related to this current study have been discussed. Findings categorized under three research questions of this study and analysis of findings are discussed in relation with research questions and literature. More specifically, the discussion will be on EFL teachers' perceptions on 21st century learning and innovation skills (4Cs) including creative thinking, critical thinking, communication and collaboration. The next discussion topic will be about if EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development. Lastly, EFL teachers' perceptions on the integration of these skills into the EFL classes will be discussed.

5.2. Discussion on EFL teachers' perceptions on 21st century learning and innovation skills (4Cs) including creative thinking, critical thinking, communication and collaboration

This study was conducted to investigate 190 EFL teachers' perceptions on 21st century learning and innovation skills (4Cs) including creative thinking, critical thinking, communication and collaboration and it was found that 21st century skills were positively related to teachers' perceptions. The questionnaire, adapted by Bedir (2019), consisted of 40 items about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) and contained four main sections as communication and collaboration, creativity and innovation, critical thinking and problem solving and reflection and awareness. The scores of the questionnaire ranged between Always True =4, Usually True= 3, Sometimes True = 2 and Never True = 1 in order to realize the level of Turkish EFL teachers' perceptions, awareness and readiness about the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in their teaching contexts. Moreover, semi-structured, face-to-face interview was conducted in order to explain and confirm the participants' beliefs in parallel to numerical data.

EFL teachers bear strong positive perceptions in relation to critical thinking, cooperation, communication and creativity. They show willingness to supply their students with encouraging atmospheres that enable students to explore and interrogate. A constructive learning place is best suitable for students to discover and experience the knowledge positively and enthusiastically. Thus, teachers designing the lessons with this demand are accepted as respectful for their learners. No doubt, instructors for any age and grade level students are the ones who can turn a class into an enjoyable and funny place. Consequently, Karakaş (2015) explains, “teachers themselves should be able to design, apply and evaluate creative ideas, provide learning experiences that will attract students and enhance their learning, enrich their professional experiences and represent good role models as the teachers of the 21st century”.

The outcomes indicated that EFL teachers hold positive dispositions regarding to 21st century skills and 4Cs. The data is parallel to the explanations in literature. From the perspective of a possible contra-argument, teachers today need a different set of skills and knowledge compared to their colleagues from the past simply by a mere fact that they are teaching a different kind of population and preparing them for a different kind of future (OECD, 2009). Therefore, it could be discussed that only those teachers who are aware of the accountability of teaching today and for the future, which has a maximum demand of their constant improvement, should repossess the control of their teaching.

The findings with regard to the sub-dimensions of 21st century learning skills suggest that EFL teachers in this study have a concern in the 4Cs and they have a curiosity of developing themselves to be able use these skills in their teaching practices. Ellis and her colleagues agree that “innovative teaching practices are often tried in an effort to make one's teaching more effective or to tackle an instructional problem or challenge (...) connected to an overall desire to improve students' learning” (Ellis et al., 2011, p. 4, 5). Furthermore, the interview results advocate the fact that EFL teachers perceive 21st century skills useful, necessary and indispensable for reaching the overall goals of teaching a language. It is important to stress that most of the teachers participated in the study have high scores about 4Cs as the major skills of the 21st century. As being foundational necessities for achievement both in life and the future career, they are focused fundamentally to prepare the learners for the future.

Findings of this study showed that participants have consistent beliefs among the sub-dimensions of the survey. Under the title of communication and collaboration, there

were questions about communicating clearly, collaborating with others and thinking interdependently. The subtitles of creativity and innovation were about thinking creatively, working creatively with others and applying past knowledge to new situations. Critical thinking and problem solving included the subtitles of thinking critically, making judgments and decisions, asking questions and solving problems. The last part about reflection and awareness included sub-topics as metacognition (Thinking about Our Thinking) with reflecting and synthesizing. That is, either they tend to have high scores for each sub-title or they have lower marks for all of the sub-dimensions. This is because of the fact that characteristics and properties of 21st century skills are consistent and coherent with each other. In fact, Voogt et al. (2013) maintain, “teachers need to be knowledgeable about the 4Cs in order to help students develop these skills and they should improve their pedagogical knowledge to align their subject teaching with the 4Cs. Similarly, P21 (2015a) reports, “the 4Cs which interrelated are ‘super skills’ for the 21st century” (p. 1).

The examination of interview also proved that the schoolmasters involved in interview perceived 21st century learning and innovation skills fundamental and effective for teaching. The participants had common tendency to have a consensus on the significance of 21st century learning and innovation skills. They seemed to agree that EFL teachers should make use of these skills to make their teaching effective and useful. Their comments focused on the fact that 21st century skills provide positive learning environments and unique opportunities for students in this new era.

In addition to the assertive comments of many teachers concerning the adequacies for 21st century skills, some teachers participated in the interview stated some difficulties they face. The classes’ being overcrowded, lack of time and technological devices were the main complaints of the participants. This finding has similar results with the study of Anagün (2018), where it was revealed, “there was a moderate relationship between the information, media and technology sub-scale of the 21st century skills and all of the subscales of the constructivist-learning environment”. This means that the more teachers become qualified to use technological devices the more they feel themselves more capable of managing the class. Thus, this research shows that the participants admit that it is challenging to implement 21st century skills in classes with lack of technology, time and training because they acknowledge 21st century skills directly associated with the use of technology.

The descriptive statistics of the research also demonstrated that instructors accept 21st century skills essential to have effective teaching in their classes. Moreover, the findings of the data show that majority of the teachers need to receive a professional development program to increase their proficiency level of using these skills. At this point, Shoffner, De Oliveira and Angus (2010) suggest, “today’s English classroom requires an extended understanding and enactment of literacy. Rather than an all-inclusive single literacy, English teachers must accept the changing and flexible nature of literacies that address areas as diverse as technology, multimedia, relationships and culture”. Thence, the classes today are to be revised and modified according to new regulations and developments including technology and digital improvements (Taylor, 2009). In fact, the results prove that teachers try to foster these skills by creating opportunities and facilities and making right options for a better future life in terms of education.

Findings related to communication and collaboration sub-dimension shows that EFL teachers focused on mostly pair work, group work or team work with this sub-title. Their answers indicated that communication and collaboration are crucial life skills that EFL teachers should use in their classes so that the students can connect with each others and work well in their future. They also add that it is not always easy to operate this sub-dimension in the class environment, but the teachers underline that they need to develop themselves more to increase the effectiveness of their teaching skills.

The results regarding to creativity and innovation sub-dimension demonstrate that EFL teachers need to encourage their learners to explore novel opinions and develop new ways of thinking. Moreover, the teachers reflected that the students need to be taught differently and supported to indicate their ideas freely unlike in the past. According to the problem solving and critical thinking sub-dimension, teachers think that the success of foreign language teaching can be increased with the help of critical thinking skills because learning critical thinking can help students to develop other skills, such as a higher level of concentration and analytical capabilities. The findings and the results supports the related literature because this study also stress the importance of using critical thinking skills to understand the situations and finding better solutions for the problems (Black, 2005; Halpern, 2014).

The results about reflection and awareness sub-dimension shows that the participants tend to perceive this sub-skill as dealing with problems and finding new solutions to them. More importantly, they commented on reflection and awareness as

understanding a situation better and making connections among different subject matters. As Slabbert (2006) pointed out, “the current century teachers do not aim to meet the needs of the 20 century learners, yet they must be extremely well-educated and highly professional facilitator (s) of learning to be able to gain and practice 21st century knowledge and skills” (p. 5). As a result, in this research EFL teachers hold positive views about 21st century skills and its sub-dimensions (4Cs) and they stated the need of having professional development program to improve themselves.

5.3. Discussion about if EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ significantly according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development

In line with the purposes of the research, the perceptions that teachers have for the 21st century survey scale were examined according to gender, age, grade level, year of job experience and participation of a professional development programme about 21st century innovation skills. The results show that the average score obtained by female teachers from 21st century skills scale is higher than the average score of male teachers, but this is not significant (See table 10). However, teachers receiving a professional development programme about 21st century innovation skills have more positive perceptions about 21st century innovation skills (4Cs) than the teachers not perceiving any professional development programme about 21st century innovation skills, which is quite significant (See table 11). This finding is in line with the Kwek' study, where he says that applying 21st century skills is staminal issue to be dealt with, which requires much time and effort to achieve in using these skills in the classes (Kwek, 2011). Furthermore, the results regarding to the grade level they work with, age and the teachers' years of job experience do not have significant differences (See table 9, 10, 11). This means that EFL teachers participated in this research tend to have positive beliefs about 21st century innovation skills (4Cs).

Findings of each sub-dimension were also analysed and the results were in parallel to the total scores. This means that apart from scores obtained from the teachers receiving a professional development programme about 21st century innovation skills, the scores got from rest of the teachers regardless of their gender, age, grade level they work with and their year of job experience do not show significant difference. In fact,

Reeves (2004) expressed similar calling for the application of 21st century skills for managing a better future.

First sub-dimension was communication and collaboration and the scores of teachers differ in favor of women according to gender, which is not important (See table 15). On the other hand, communication and collaboration scores of teachers differ according to their professional education they received about 21st Century Innovation Skills and this difference is in favor of the ones who participated a professional development program, which is significant in this current research (See table 16). The results regarding to the grade level they work with, age and the teachers' years of job experience under this sub-dimension do not have important differences (See table 17, 18, 19).

The other two sub-dimensions except for the sub-dimension of reflection and awareness, which were creativity and innovation, critical thinking and problem solving have similar results with the first sub-dimension (See part 4.4, 4.5, 4.6). This is consistent with the study of Bedir (2019), who carried out a study about pre-service EFL teachers' beliefs and perceptions on 21st century learning and innovation skills (4Cs) and asserted, "they need a curriculum supported with profession development activities to improve their understanding on the 4Cs" (p.241). Similarly, if pre-service teachers comprehend 21st century skills better they can easily improve and develop new ways to use these skills effectively in their teaching forms (Carlgren, 2013 as cited in Bedir, 2019).

As a matter of fact, the teachers' perceptions included in this current study proved that if they receive a professional development program regarding to 21st century learning and innovation skills (4Cs), they become more competent and have more positive comprehension and perception in managing these skills with their teaching practices. Concerning teachers' opinions about 21st century learning and innovation skills (4Cs), all the participants regardless of their gender, age, grade level they work with, year of job experience and any participation of a professional development programme indicate positive statements about the issue under investigation. The participants had tendency to have a consensus on the importance of 21st century learning and innovation skills. They seemed to agree that EFL teachers should make use of these skills to make their teaching effective and useful. Their comments focused on the fact that 21st century skills provide positive learning environments and unique opportunities for students in this new era. However, it is important to note that EFL teachers receiving

a professional development program regarding to 21st century learning and innovation skills (4Cs) highlight the importance of using 21st century skills in the classes more than the other participants do. They also add that it is possible for teachers to use these skills with any age group in spite of some challenges to teaching and learning processes unlike the teachers not having a professional development program.

5.4. Discussion of EFL teachers' perceptions on the integration of these skills into the EFL classes

Another research question was about EFL teachers' perceptions on the integration of these skills into the EFL classes. The results of this current study highlighted the importance and necessity of using 21st century skills (4Cs) in the classes as a result of EFL teachers' perceptions. They all agree that 4Cs has gained more and more significance recently and it has become a concern for almost all of EFL teachers who want to improve and raise the quality of their teaching. Therefore, participants emphasized that incorporating 4Cs to class activities are effective and beneficial particularly in terms of student learning processes. They also think that 21st century skills should be given more space in the curricula and the books should include these skills with versatile activities. Similarly, Davila (2016) states;

By applying the 4Cs into EFL classes, we can turn a typical grammar lesson into something magical where teachers have an active role as facilitator and students become inspired, self-guided learners-who still manage to work inside of the confines of the curriculum.

There is a consensus among researchers, scholars, educationists, psychologists and teachers about the necessity of integrating the 21st century skills into education (P21 Partnership, 2007; Partnership for 21st century skills & AACTE, 2010; Savu; Chirimbu, & Dejica-Cartis, 2014; Cox, 2014 & Junpho, 2015 as cited in Saleh, 2019). Besides, Michael Barber to the 2000 Rotterdam Conference, for example, discussed novel driving forces to new forms in the terms below:

The explosion of knowledge about the brain and the nature of learning, combined with the growing power of technology, create the potential to transform even the most fundamental unit of education - the interaction of the teacher and the learner. Moreover, huge social changes, such as growing diversity and population mobility, present educators with new and constantly changing circumstances. As a result, the characteristics which defined the successful education systems of, say,

1975, are unlikely to be those which will define success in the future (OECD, 2003a, p. 115)

Therefore, EFL teachers in this study were also found to stress the need for new approaches and skills to be integrated in the teaching and the results show similarities with the previous studies regarding to the integration of 21st century skills into the EFL classes. Additionally, although many teachers in the research demonstrated favourable belief for the use 21st century learning and innovation skills (4Cs) with their teaching practices and some differences were found according to teachers' receiving a professional development. That is, teachers not having any professional development about 4Cs exhibited more comfort with technology and related the use of these skills to the existence of technology. At this point, this current study has similar results with Bedir's research with pre-service teachers, in which he explains;

ELT pre-service teachers perceived 21st century learning and skills as the integration of technology into teaching and learning which requires teacher to improve their technological knowledge as well as pedagogical and content knowledge. Ministry of National Education weighed in on the importance of including technology within the curriculum to meet the needs of 21st century learners. In ELT curriculum, the course Educational Technologies and Material Development is tailored to equip student teachers with adequate technology literacy and classroom applications (Bedir, 2019).

The other noteworthy result is about the difference about EFL teachers' perceptions regarding to the implementation of 21st century skills in the EFL classes. Apart from the teachers having professional development program, the rest of the teachers says that they have problems with the implementations of 4Cs because of the lack of materials including technology, media, specifically a lack of computers, visuals and audial materials. Holcomb (2009) indicates, "key factor in the initiation of change is the identification of a high-profile need that participants feel is relevant, for which a sense of readiness has been created and for which resources have been allocated to demonstrate the organization's commitment" (p. 12). Therefore, that sense of readiness and availability, which the teachers state, needs to be solved although they philosophically believe in the standards of 21st century teaching and learning.

Moreover, time shortage to cover the essential topics and student requirements was another handicap for teachers to implement 21st century skills effectively. Especially, the teachers in the interview stressed that there is pressure on them to cover

any subject matter so that the students would be successful in high-stakes testing. Thus, they do not have enough time to catch up with the 21st century standards by adding that professional development program can help them to reduce this complexity. In fact, Rotherham and Willingham (2009) believe that 21st century skills have existed throughout the history of mankind and they have gained afresh significance with the shift in technological, social and economic life. The writers think that although these skills have been taught for years a novel emphasis has been put which requires teachers to improve themselves to catch up with the new applications.

In conclusion, this research clarifies the fact that EFL teachers ask for professional development programmes for acquiring and using the 21st century learning and innovation skills (4Cs) better in their classrooms. The analysis of quantitative and qualitative data clearly demonstrated that EFL teachers receiving a professional development program about 21st century learning and innovation skills(4Cs) tend to have more positive perceptions both in theory and practice. Lifelong learning is essentially a part of teaching and learning processes in the 21st century. Today learners are deserving of renewed education with the most recent teaching practices with 4Cs. These results also prove better understanding of the demand for professional developmental programme, for instructors to guarantee student accomplishments for their future lives.

5.5. Chapter Summary

In this chapter, results regarding to each research question have been debated in line with the studies in the literature of the same field. Moreover, similar and different results have been stressed in relation to the previous studies.

CHAPTER VI

CONCLUSION

6.1. Introduction

This current study investigated EFL teachers' perceptions on 21st century learning and innovation skills (4Cs) via both quantitative and qualitative data. This chapter presents concluding remarks of this specific study.

6.2. Conclusions

This research aimed to uncover EFL teachers' perceptions on 21st century learning and innovation skills, specifically the 4Cs. For this purpose, quantitative and qualitative data instruments were used to gather the answers for the following research questions.

1. What are EFL teachers' perceptions on 21st century learning and innovation skills (4Cs), which are creative thinking, critical thinking, communication and collaboration?
2. Do EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ significantly according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development.
3. What are EFL teachers' perceptions on the integration of these skills into the EFL classes?

The first research question targeted to illustrate the EFL teachers' beliefs and perceptions on 21st century learning and innovation skills (4Cs), which includes four sub-dimensions as creative thinking, critical thinking, communication and collaboration. The questionnaire with 40 items representing the sub-dimensions of 21st century skills was completed by EFL teachers and then semi-structured interviews were conducted with them. The results of the data analysis revealed that EFL teachers mostly have positive perceptions about 21st century skills. The teachers had generally similar scores for the level of their perceptions about these skills except for the teachers who received a professional development program about 21st century learning and innovation skills.

In relation to the first research question, the second question of the study aimed to answer if EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development and if this difference is significant according to these variables. The results showed teachers receiving a professional development program about 21st century skills tend to have more positive perceptions than the rest of the teachers participated in the study. Teachers having a professional development program are also more open to new applications and implementations when they are compared to other teachers. Thus, this study clarified that apart from the variable, which is related with receiving a professional development, other variables in this study like gender, age, grade level the teachers work with and the year of job experience do not create any significant difference among EFL teachers.

The last research question was related with EFL teachers' perceptions on the integration of these skills into the EFL classes. The results were striking because only the teachers receiving a professional development program think that using these skills in the classes does not mean the use of technology. However, the other teachers participated in the interview were of the idea that they had difficulties to implements 21st century skills in the teaching as there is lack of technology, internet or any other media tools. They also think that crowded classes, lack of time and materials puts barriers to implement these skills in the teaching processes. On the other hand, teachers with professional development seem to manage well with crowed classes and use the time more effectively.

It can be inferred that having a professional development program about 21st century learning and innovation skills (4Cs) have clear positive results on EFL teachers' thinking dispositions about 21st century learning and innovation skills and helped them implement these skills in their teaching practices better.

6.3. Implications

The specific aim of this study was to explore EFL teachers' perceptions about 21st century learning and innovation skills (4Cs) and clarify if EFL teachers' perceptions of 21st century learning and innovation skills (4Cs) differ according to gender, age, year of job experience, grade level they work with and whether or not they received a professional development and is this difference significant according to the variables.

This current study yielded some positive results supporting the fact that having a professional development program about 21st century learning and innovation skills (4Cs) can contribute to EFL teachers' perceptions about these skills. In fact, EFL teachers receiving a professional development program about these skills tend to have more positive dispositions and they are more open to implements these skills in their teachings. From this perspective, the results of this study shows significant points to be searched by other researchers and instructors in the future.

According to Ledward and Hirata (2011);

21st century skills are more than technological literacy and include proficiency in critical thinking, problem solving, communication, and teamwork. Ultimately, these skills allow people to thrive in the new economy since they help people a) access, synthesize, and communicate information; b) work collaboratively across differences to solve complex problems; and c) create new knowledge through the innovative use of multiple technologies.

Without doubt, this can be achieved only by professionally developed teachers on this specific issue. After all, Hamilton (1996) states, "not only can such innovation skills keep the education service flexible, responsive, and self-renewing, but it can also promote a sense of well-being in the teaching profession".

The outcomes of the present study demonstrate that EFL teachers are most likely to gain more positive perceptions through receiving a professional development program about 21st century learning and innovation skills (4Cs). Indeed, there are different levels of perceptions among EFL teachers according to a variety of variables such as gender, age, year of job experience, grade level they work with and whether or not they received a professional development and is this difference. However, only the teachers with professional development programs show significant differences from rest of the participants about their perceptions of 21st century skills. On the other hand, it must not be undervalued that most of the teachers of this study have positive perceptions about these skills and they are aware of the importance of using these skills in the teaching and learning processes. The results mentioned in this current study might ensure implications for language instructors, curriculum designers, textbook writers and researchers in the field.

With this study, the significance of organizing professional development programs for EFL teachers was clearly proven. Undoubtedly, teachers need to possess, dominate and adjust 21st century skills (4Cs) in order to enrich their pedagogical

processes and instructional practices. In other word, organising professional programs can inspire teachers for innovation in order to give their students more chances to develop the literacies, which are necessary for today's world. This truth may also promise inclusions for education faculties, which raise language teachers and educational programs for pre-service teachers. The study is expected to contribute to the scarce number of studies in the field.

6.4. Recommendations for Further Research

This study tried to explore and explain EFL teachers' perceptions on 21st century learning and innovation skills (4Cs) and understand if there is a significant difference among their perceptions according to different variables such as gender, age, year of job experience, grade level they work with and whether or not they received a professional development programme or not. These variables can be analysed in depth from different angles in the future. In addition, the study included application of a questionnaire and a semi-structured interview, so in future studies lesson observations can be conducted as well. This means that an action research can be conducted to uncover the actual process of implementing 21st century skills in the class environments. Finally, future studies can also include a bigger sample to be able to get more precise and reliable results. Without doubt, additional study is necessary to express the lacking points better in referring to 21st century skills in professional development and the support and guidance essential for teachers in implementation.

6.5. Chapter Summary

In this chapter a general conclusion of the study has been provided, implications have been underlined for the field and further recommendations have been suggested for future studies.

REFERENCES

- American Management Association. (2019). AMA critical skills survey: workers need higher level skills to succeed in the 21st century. Retrieved from <https://www.amanet.org/articles/ama-critical-skills-survey-workers-need-higherlevel-skills-to-succeed-in-the-21st-century/> on 05.10.2019.
- Anagün, Ş. S. (2018). Teachers' Perceptions about the Relationship between 21st Century Skills and Managing Constructivist Learning Environments. *International Journal of Instruction*. October 2018, Vol.11, No.4. (pp. 825-840).
- Ananiadou, K., & Claro, M. (2009). 21st century skills and competences for new millennium learners in OECD countries", *OECD Education Working Papers*, No. 41, OECD Publishing. Retrieved from <http://dx.doi.org/10.1787/218525261154> on 01.12.2019.
- Applied Educational Systems. (2019). What are the 4C's of 21st century skills? Retrieved from <https://www.aeseducation.com/career-readiness/what-are-the-4-cs-of-21st-century-skills> on 01.03.2020.
- Armstrong, S., & Warlick, D. (2004). The new literacy (online). *Technology and learning magazine*. Retrieved from <http://www.techlearning.com/curriculum/0035/the-new-literacy/42060> on 21.11.2019.
- Arslan, R. Ş. (2012). Bridging the gap between policy and practice in teaching English to young learners: The Turkish context. *Pamukkale University Faculty of Education Journal*, 32, 95-100.
- Aydoğan, İ. & Çilsal, Z. (2007). Yabancı dil öğretmenlerinin yetiştirilme süreci. (Türkiye ve diğer ülkeler). *Sosyal Bilimler Enstitüsü Dergisi*. 22(1), 179-197.
- Bedir, H. (2019). Pre-service ELT teachers' beliefs and perceptions on 21st century learning and innovation skills (4Cs). *Journal of Language and Linguistic Studies*, 15(1), 231-246.
- Bektaş-Altıok, G. R. (2006). *Türkiye'de ilköğretim okullarında etkili yabancı dil öğretimi: tarihsel gelişim ve açılımları*. Unpublished master's dissertation, Yeditepe University, İstanbul.
- Bell, E. & Bryman, A. (2007). The ethics of management research: an exploratory content analysis. *British Journal of Management*, 18(1), 63-77.

- Biggerstaff, D. & Thompson, A. R. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative Research in Psychology*, 5(3), 214-224.
- Black, R. (2009a). English-Language learners, fan communities, and 21st-Century skills. *Journal of adolescent and adult literacy*, 52(8), 688-697.
- Black, R. (2009b). English-language learners, fan communities, and 21st century skills. *Journal of adolescents & adult Literacy*. 52(8). 668-697.
- Black, S. (2005). Teaching students to think critically. *The Education Digest*, 70(6), 42-47.
- Borg, Simon. 2009. Language teacher cognition. In Anne Burns and Jack C Richards (Eds). *The cambridge guide to second language teacher education* (pp. 163-171). Cambridge: Cambridge University Press.
- Bransford, J., Brophy, S. & Williams, S. (2000). When Computer Technologies Meet the Learning Sciences: Issues and Opportunities, *Journal of Applied Developmental Psychology* 21(1): 59-84.
- Braun, V. & Clarke, V. (2013). Successful Qualitative Research: A Practical Guide for Beginners. Retrieved from https://www.researchgate.net/publication/256089360_Successful_Qualitative_Research_A_Practical_Guide_for_Beginners/citation/download on 01.03.2020
- Can, A. (2005). İngilizce öğretmeni yetiştirme programının kazandırdığı konu alanı öğretmen yeterliliklerinin standartlara göre değerlendirilmesi. Unpublished Doctoral Dissertation. Ankara Üniversitesi, Ankara.
- Canagarajah, A.Suresh. 1999. Interrogating the “native speaker fallacy”; Non-linguistic roots, non-pedagogical results. In George Braine (ed.), *Non-native educators in English language teaching* (pp. 77-92). Mahwah, N.J: Lawrence Erlbaum.
- Chang, S.Y., & Tung, C.A. (2009). Incorporating 21st century skills into business English instruction. *Feng Chia Journal of Humanities and Social Sciences*, 19, 255-286. Retrieved from <http://www.cohss.fcu.edu.tw/wSite/publicfile/Attachment/f1263802406519.pdf> on 10.12.2019.
- Chen, M. (2010). *Education Nation: Six Leading Edges of Innovation in our Schools*. San Francisco, CA: Jossey-Bass.
- Chukwuma, H. & Otagbumagu, E. (eds.) (2007), *English for Academic Purposes*. Ibadan AFP Africana-FEP Publishers.

- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research*. Volume: 3 issue: 2, page(s): 95-108. Retrieved from <https://journals.sagepub.com/doi/10.1177/1558689808330883> on 12/01/2020.
- Creswell, J.W, and Plano Clark, V. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA : Sage.
- Creswell, J.W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. (4th Ed.). Boston, MA: Pearson.
- Davila, S. (2016). 21st century skills and the English language classroom. Retrieved from <https://www.english.com/blog/21st-century-skills/> on 14.11.2019.
- Day, R. (1993). Models and The Knowledge Base of Second Language Teacher Education. *Second Language Studies*. 11(2), 1-13.
- Dewey, J. (1899). *The school and society*. Chicago, IL: The University of Chicago Press.
- Eaton, S.E. (2010). *Global Trends in language learning in the twenty first century*. Calgary: Onate Press.
- Ekinci, L. (2012). Teacher self-efficacy beliefs of candidate teachers in education faculty and pedagogical formation program. *Educational Process: International Journal*. 1(1-2):19-28 DOI 10.12973/edupij.2012.112.2
- Ellis, D., Bissonnette, C., Furion, S., Hal, Sh., Kenyon, T., McCarville, R., Stublely, G. & Woudsma, C. (2011). *The Task Force on Innovative Teaching Practices to Promote Deep Learning at the University of Waterloo: Final Report*. Retrieved from https://uwaterloo.ca/centre-for-teaching-excellence/sites/ca.centre-for-teaching-excellence/files/uploads/files/Task%20Force%20Report%20on%20Deep%20Learning_0.pdf on 09.11.2019.
- Elsner, D. (2011). Developing multi literacies, plurilingual borg awareness and critical thinking in the primary language classroom with multilingual virtual talking books. *Encuentro*, 20, 27-38.
- 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.*
- Ersöz, A., Çakır, A., Cephe, P. T., Peker, B. G., Özkan, N., Büge, C. & Özmen, D. (2006). *English language curriculum for primary education grades 4, 5, 6, 7, and 8*. Ankara: Devlet Kitapları Müdürlüğü.

- European Commission, (2010). Common European Principles for Teachers' Competences and Qualifications. Lifelong Learning: Education and Training policies. School education and higher education.
- European Commission. (NN). Common European Principles for Teacher Competences and Qualifications. Retrieved from <http://www.pef.uni-lj.si/bologna/dokumenti/eu-common-principles.pdf> on 12.10.2019.
- Faez, F. (2011). Points of departure: Developing the knowledge base of ESL and FSL teachers for K-12 programs in Canada. *The Canadian Journal of Applied Linguistics*, 14(1), 29-49. Retrieved from <https://pdfs.semanticscholar.org/> on 06/02/2020.
- Fandiño, Y. (2013a). 21st century skills and the English foreign language classroom: A call for more awareness in Colombia. *Gist Education and Learning Research Journal*, 7, pp. 190-208 .ISSN 1692-5777.
- Fandiño, Y. (2013b). Knowledge base and EFL teacher education programs: a Colombian perspective. *Íkala, revista de lenguaje y cultura*, 18(1), 83-95. Retrieved from <http://www.scielo.org.co/> on 06/02/2020.
- Fowler, F.J. (2014). *Survey research methods*. University of Massachusetts, Boston, 5th edition.
- Fraenkel, J. R., Wallen, N. E. & Hyun, H. H. (2012). *How to Design and Evaluate Research in Education*. New York: The McGraw-Hill Companies.
- Freeman, D., & Johnson, K. E. (1998a). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32, 397–417.
- Gardner, H. (2010). Five Minds for the Future. In Bellanca, J., & Brandt, R. (Eds.), *21st century skills: Rethinking how students learn*. Bloomington, IN: Solution Tree.
- Grossman, G.M., Sands, M.K. & Brittingham, B. (2010). Teacher education accreditation in Turkey: The creation of a culture of quality. *International Journal of Educational Development*, 30, 102-109.
- Gürsoy, E., Korkmaz, Ş. Ç. & Damar, E. A. (2013). Foreign language teaching within 4+4+4 education system in Turkey: Language teachers' voices. *Eurasian Journal of Educational Research*, 53/A, 59-74.
- Halpern, D. F. (2014). *Thought and knowledge: an introduction to critical thinking (5th ed.)*. New York, NY: Psychology Press.

- Halvorsen, A. (2018). 21st Century Skills and the “4Cs” in the English Language Classroom. University of Oregon retrieved from <https://scholarsbank.uoregon.edu/> on 20.12.2019.
- Hamilton, J. (1996). *Inspiring innovation in language teaching*. Great Britain: Multilingual Matters Ltd.
- Harden, R.M., Crosby J. (2000). The good teacher is more than a lecturer-the twelve roles of the teacher. Centre for Medical Education, University of Dundee, UK. *Medical Teacher*, Vol. 22, No. 4, 2000
- Haut, M. (2010). *Teachers’ enactment of multiliteracies in the English language arts*.
- Herbele, V. (2010). Multimodal literacy for teenage EFL students. *Cadernos de Letras*, 27, 101-116. Retrieved from <https://www.researchgate.net/publication/>
- Herrmann, E. (2015). The 4 C’s of 21st century learning for ELLs: Critical thinking. Retrieved from <http://exclusive.multibriefs.com/content/the-4-cs-of-21st-century-learning-for-ells-critical-thinking/education> on 20.01.2020.
- Holcomb, E. (2009). *Asking the right questions: tools for collaboration and school change*. Thousand Oaks, CA: Corwin Press, A SAGE Company
- Hu, Y. (2007). *China’s foreign language policy on primary English education: From policy rhetoric to implementation reality*. Unpublished Doctoral Dissertation, Purdue University.
- Illeris, K. (2009). A comprehensive understanding of human learning. In Illeris K. (Ed). *Contemporary Theories of Learning – Learning theorist in their own words*. Routledge Taylor and Francis Group: London and New York.27.
- Illeris, K. (2015). The Development of a Comprehensive and Coherent Theory of Learning. *European Journal of Education*, Vol. 50, No. 1.
- İpek, Ö. F. & Daloğlu, A. (2017). The effectiveness of special teaching methods I course in preparing students to special teaching methods II course: A case study. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 17 (1), 231-249.
- Kabilan, M. K. (2000). Creative and critical thinking in language classrooms. *The Internet TESL Journal*, 6(6). Retrieved from <http://iteslj.org/Techniques/KabilanCriticalThinking.html> on 12.10.2019.
- Karabuğa, F. (2016). The perspectives of both pre-service teachers and their educators on EFL teacher education programs in Turkey. *International Journal of Language Academy*, 4 (1), 331-347.

- Karakaş, M. M. (2015). Ortaokul sekizinci sınıf öğrencilerinin fen bilimlerine yönelik 21. Yüzyıl beceri düzeylerinin ölçülmesi (Yayımlanmamış yüksek lisans tezi). Eskişehir Osmangazi Üniversitesi Eğitim Bilimleri Enstitüsü, Eskişehir.
- Kelly, M., Grenfell, M., Allan, R., Kriza, C., McEvoy, W. (2004). European Profile for Language Teacher Education –A Frame of Reference. Final Report. A Report to the European Commission Directorate General for Education and Culture. School of Humanities, University of Southampton Southampton, SO17 1BJ, UK retrieved from <https://www.researchgate.net/> on 23/01/2020
- Kırkgöz, Y. (2007). English language teaching in Turkey: Policy changes and their implementations. *RELC Journal*, 38 (2), 216-228. Retrieved from <https://doi.org/10.1177/0033688207079696> on 10.02.2020.
- Kırkgöz, Y. (2009). English language teaching in Turkish primary education. In J. Enever, J. Moon & U. Raman (Eds.), *Young learner English language policy and implementation: International perspectives*. (pp.189-195). Reading, UK: Garnet Publishing.
- Kırkgöz, Y. (2017). English Education Policy in Turkey. In R. Kirkpatrick (Ed.), *English Language Education Policy in Middle East and North Africa* (pp. 235-256). Springer International Publishing.
- Klynhout, M. (2018). A concrete example of how to add a layer of 21st-century skills to lesson plans. Retrieved from <https://whatifspirit.com/en/a-concrete-example-of-how-to-add-a-layer-of-21st-century-skills-to-lesson-plans/> on 02.10.2019.
- Korkmazgil, S. (2015). An Investigation into Turkish English Language Teachers' perceived Professional Development Needs, Practices and Challenges. A Thesis Submitted to The Graduate School of Social Sciences of Middle East Technical University.
- Kovacs, H. (2017). Learning and Teaching in Innovation: why it is important for education in 21st century. DOI: 10.21549/NTNY.18.2017.2.4
- Kwek, S.H. (2011). Innovation in the Classroom: Design Thinking for 21st Century Learning. (Master's thesis). Retrieved from http://www.stanford.edu/group/redlab/cgi-bin/publications_resources.php on 03.01.2020.
- Kwo, O. (2010). Teachers as Learners: A Moral Commitment. In Kwo O. (Ed). *Teachers as Learners – Critical Discourse on Challenges and Opportunities*. CERC Studies in Comparative Education 26

- Larson, L. C. & Miller, T. N. (2011). 21st Century Skills: Prepare Students for the Future, *Kappa Delta Pi Record*, 47:3, 121-123.
- Ledward, B. C., & Hirata, D. (2011). An Overview of 21st Century Skills. Summary of 21st Century Skills for Students and Teachers, by Pacific Policy Research Center, Honolulu: Kamehameha Schools-Research & Evaluation. Retrieved from http://www.ksbe.edu/_assets/spi/pdfs/21st_Century_Skills_Brief.pdf on 18.10.2019.
- Lee, J. C. K., Zhang, Z., Song, H. & Huang, X. (2013). Effects of epistemological and pedagogical beliefs on the instructional practices of teachers: A Chinese perspective. *Australian Journal of Teacher Education*, 38(12), 120-146.
- Mahalingappa, L. J. & Polat, N. (2013). English language teacher education in Turkey: policy vs academic standards. *European Journal of Higher Education*, 3 (4), 371-383.
- Marshall, N. M. (1996). Sampling for qualitative research. *Oxford Journals Family Practice*, 13(6), 522-526. Retrieved from <https://doi.org/10.1093/fampra/13.6.522> on 10.11.2019.
- Merriam, S. B. (2009). *Qualitative Research: a guide to design and interpretation*. San Francisco: Jos-sey-Bass.
- Millî Eğitim Bakanlığı [Republic of Turkey, Ministry of National Education (MoNE)]. (2013). *English language teaching program (grades 2-8)*. Ankara: T.C. Millî Eğitim Bakanlığı.
- Millî Eğitim Bakanlığı [Republic of Turkey, Ministry of National Education (MoNE)]. (2006). *English language teaching program*. Ankara: T.C. Millî Eğitim Bakanlığı.
- Millî Eğitim Bakanlığı [Republic of Turkey, Ministry of National Education (MoNE)]. (2008). *English language teaching program*. Ankara: T.C. Millî Eğitim Bakanlığı.
- Millî Eğitim Bakanlığı [Republic of Turkey, Ministry of National Education (MoNE)]. (2007). *General Competencies for Teaching Profession. Directorate General for Teacher Training*. Ankara
- Millî Eğitim Bakanlığı [Republic of Turkey, Ministry of National Education (MoNE)]. (2013). *English language teaching program (grades 2-8)*. Ankara: T.C. Millî Eğitim Bakanlığı.

- Millî Eğitim Bakanlığı. (2018). [Republic of Turkey, Ministry of National Education (MoNE)], Turkey's Education Vision, 2023 http://2023vizyonu.meb.gov.tr/doc/2023_VIZYON_ENG.pdf, retrieved on 26,12,2019.
- Mirici, İ. H. & Yangın Ekşi, G. (2016). A descriptive study on the profile of some potential English language teachers. *International Online Journal of Education and Teaching (IOJET)*,3(1). 65-81. Retrieved from <http://iojet.org/index.php/IOJET/article/view/121/123> on 10.02.2020.
- MoNE – Turkish Ministry of National Education [Millî Eğitim Bakanlığı] (2006). Generic teacher competencies [*Genel öğretmen yeterlikleri*].
- MoNE – Turkish Ministry of National Education [Millî Eğitim Bakanlığı] (2008). *İngilizce öğretmeni özel alan yeterlikleri* [Subject-area teacher competencies of English language teachers].
- National Education Association. (2015). Preparing 21st century students for a global society: An educator's guide to the "Four Cs". Retrieved from <http://www.nea.org/assets/docs/A-Guide-to-Four-Cs.pdf> on 02.01.2020.
- OECD (2003a), *Networks of Innovation: Towards New Models for Managing Schools and Systems*, (Schooling for Tomorrow series) OECD, Paris.
- OECD (2006). *Assessing Scientific, Reading and Mathematical Literacy: A Framework for PISA 2006*, Paris: OECD Publications.
- OECD. (2009). Organisation for Economic Co-operation and Development Annual Report. Retrieved from <https://www.oecd.org/newsroom/43125523.pdf> on 03.01.2020.
- OECD. (2018). OECD Learning Framework 2030. Retrieved from <https://www.oecd.org/education> on 22.02.2020.
- Öztürk, G., Aydın, B. (2019). English Language Teacher Education in Turkey: Why Do We Fail and What Policy Reforms Are Needed? *Anadolu Journal of Educational Sciences International*, 2019; 9(1): 181-213 DOI: 10.18039/ajesi.520842.
- Paul Hamlyn Foundation and the Innovation Unit. (2008). *Learning Futures: Next Practice in learning and teaching*. London. Retrieved from www.innovation-unit.co.uk/images/stories/files/pdf/learningfutures_booklet.pdf on 02.09.2019
- P21 Framework for 21st Century Learning. (2015a). <https://www.researchgate.net/figure/P21-Framework-for-21st-Century-Learning>, retrieved on 12,12,2019

- P21 Partnership for 21 First Century Learning. 2007. Retrieved from www.P21.org/Framework on 10.11.2019.
- Partnership for 21st Century Skills (2009). A framework for 21st century learning. Tucson: AZ: P21. Retrieved from www.21stcenturyskills.org on 21.10.2019.
- Partnership for 21st Century Skills [PCS]. (2008). *Transition brief: Policy recommendations on preparing Americans for the global skills race*. Retrieved from http://www.21stcenturyskills.org/documents/p21_transition_paper_nov_24_2008.pdf on 25.10.2019.
- Partnership for 21st Century Skills [PCS]. (2009b). *Framework definitions*. Retrieved from www.p21.org/documents/P21_Framework_Definitions.pdf on 20.09.2019.
- Patton, M.Q. (2002) *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Pink, D. H. (2005). *A Whole New Mind: Why right-brainers will rule the future*. New York: Riverhead.
- Polit D.F. & Beck C.T. (2010) *Essentials of Nursing Research: Appraising Evidence for Nursing Practice*, 7th edn. Wolters Kluwer Health / Lippincott Williams & Wilkins, Philadelphia.
- Progressive Education. (2008). In *The Columbia Encyclopedia, Sixth Edition*. Retrieved from <http://www.encyclopedia.com/doc/1E1-progrsved.html> on 10.09.2019.
- Reeves, D. B. (2004). *Accountability for Learning: How Teachers and School Leaders Can Take Charge*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Reid, S. (2000). Teaching critical thinking. Retrieved from www.irepository.net/contents/asia-u/11300064.pdf on 16.10.2019.
- Richards, J. C. (2008). Second language teacher education today. *RELC Journal*, 39 (2), 158–177.
- Richards, J.C. (2010). Competence and Performance in Language Teaching. *RELC Journal: A Journal of Language Teaching and Research*, v41 n2 p101-122. Retrieved from <https://eric.ed.gov/> on 07/02/2020.
- Robson C. (2007) *How to do a Research Project: a guide for undergraduate students*. Blackwell Publishing, Oxford.
- Rosefsky S. A. & Opfer, V. (2012). Learning 21st-century skills requires 21st-century teaching. *Phi Delta Kappa*, 94(2), 8-13.

- Rotherham, A., & Willingham, D. (2009). 21st century skills: The challenges ahead. *Educational Leadership*, 67(1), 16-21.
- Saleh, S. E. (2019). 4Cs in the EFL Classroom. University of Sabratha. 4. 57-80.
Retrieved from
https://www.researchgate.net/publication/336667149_4Cs_in_the_EFL_Classroom on 02.02.2020.
- Saleh, S.E. (2019). 4Cs in the EFL Classroom. *Sabratha University*. University Bulletin – ISSUE No.21- Vol. (4) – June - 2019. Retrieved from <https://www.researchgate.net/publication/336667149> on 21.11.2019.
- Şallı-Çopur, D. S. (2008). *Teacher effectiveness in initial years of service: A case study on the graduates of METU language education program* (Unpublished doctoral dissertation). Middle East Technical University, Ankara, Turkey.
- Sawyer, R. K. (2006). Educating for innovation, *Thinking Skills and Creativity*, 41-48
- Seferoğlu, G. (2004). A study of alternative English teacher certification practices in Turkey. *Journal of Education for Teaching*, 30 (2), 151-159
- Shoffner, M., De Oliveira, L., & Angus, R. (2010). Multiliteracies in the secondary English classroom: Becoming literate in the 21st century. *English Teaching: Practice and Critique*, 9(1), 75-89.
- Slabbert, J. A. (2006). *Radically innovative: PGCE lecturer information package*: University of Pretoria, Faculty of Education.
- Taylor, F. (2009). Authentic internet in the EFL class. *Modern English Teacher*, 18(1), 5-9. Unpublished master's thesis, University of Victoria, Canada.
- Van Manen, M. (1990). *Researching lived experience*. New York: SUNY Press.
- Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the twenty-first century. *Journal of Computer Assisted Learning*, 29, 403–413.
- Warschauer, M. (2001). Millennialism and media: Language, literacy, and technology in the 21st century. In D. Graddol (Ed.), *Applied linguistics for the 21st century* (pp. 49-59). Milton Keynes, UK: AILA.
- Zhao, Y. (2009). *Catching Up or Leading the Way*. Alexandria, VA: ASCD.

APPENDICES

Appendix 1. 21st century learning and innovation skills (4Cs) questionnaire

Dear ELT Teachers;

This survey is part of a research study being conducted by Hacer KAÇAR, supervised by Prof. Dr. Hasan BEDİR at Çukurova University. The study aims to investigate ELT teachers' perceptions and readiness on 21st century innovation and learning skills in EFL classrooms. Your participation is completely voluntary and all the information collected will be kept private and confidential.

Thank you for your valuable contributions.

Prof. Dr. Hasan BEDİR

hbedir@cu.edu.tr

Hacer KAÇAR

hacerkacar6@gmail.com

Part I: Demographics

1. What is your gender?

Male () Female ()

2. What is the grade level you are currently practicing your teaching skills?

Primary School	Middle School	High School

3. Which age are you in?

21-29 years	30-39 years	40-49 years	50-59 years	60-69 years

4. How many years have you been teaching?

0-2 years	3-5 years	6-8years	12-15 years	16-20 years	20+ years

5. Did you attend any professional development programme during last two years?

Yes () No ()

Part II: Survey Items

Please rate to what extent you are ready for the implementation of 4Cs (Communication, Collaboration, Creativity and Critical thinking) in your teaching by placing a CROSS in the appropriate box.

	Always true	Usually true	Sometimes	Never true
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 can 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, analyze and evaluate my own ideas in order to improve and maximize creative efforts.				
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.				

Appendix 2. Semi-structured interview questions

1. How do you define 21st Century Learning?
2. What can you say about Communication and Collaboration?
3. What can you say about Creativity and Innovation?
4. What can you say about Critical Thinking and Problem Solving?
5. What can you say about Reflection and Awareness?
6. Do you think these skills are effective in language learning/teaching? Please explain briefly.
7. Please describe a specific activity or strategy used in your classroom that addresses these skills?
8. Can you provide any additional comments you may have about 21st learning and innovation skills?
9. Do you intend to integrate 4Cs (Communication, collaboration, critical thinking and creativity) into your lessons?
10. Do you want to add anything about 21st century skills and its implementation?

Appendix 3. Legal permissions of Adana Provincial Directorate of National Education



T.C.
ADANA VALİLİĞİ
İl Millî Eğitim Müdürlüğü

Sayı : 98258552-604.01.01-E.20317702
Konu : Hacer Kaçar'ın Uygulama İzni.

18.10.2019

.....İLÇE MİLLÎ EĞİTİM MÜDÜRLÜĞÜNE

İlgi: Müdürlük Makamı'nın 13.10.2019 tarih ve 19786633 sayılı yazısı.

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü İngiliz Dili Eğitimi Anabilim Dalında yüksek lisans öğrencisi Hacer Kaçar'ın " ELT teachers' Perceptions on 21 st Century Learning and Innovation Skills in EFL Classes (İngilizce'nin Yabancı Dil Olarak Öğretildiği Sınıflarda 21.Yüzyıl Öğrenme ve Yenilik Becerileri Üzerine İngilizce Öğretmenlerinin Görüşü)" konulu uygulama çalışmasını ilgi olur ekte gönderilmiştir.

Söz konusu uygulama çalışmasının okul/kurum müdürlerinin denetim , gözetim ve sorumluluğunda , 2019-2020 eğitim-öğretim yılında eğitim öğretim aksatılmadan ve gönüllülük esasına göre uygulanması hususunda;

Gereğini rica ederim.

Hıdır ÜNVERDİ
Müdür a.
Müdür Yardımcısı

Ek:
- Yazı ve Ekleri

Dağıtım:
- 15 İlçe Millî Eğitim Müdürlüğüne

Adres:
Elektronik Ağ: <http://adana.meb.gov.tr>
e-posta: arge01@meb.gov.tr

Bilgi için: AYLİN SCHREGLMANN - Bilgisayar İşletmeni
Tel: 0 (322) 200 91 82
Faks: 0 () _____

Bu evrak güvenli elektronik imza ile imzalanmıştır. <https://evraksorgu.meb.gov.tr> adresinden b6f0-6522-3600-b496-ce5c kodu ile teyit edilebilir.



T.C.
ADANA VALİLİĞİ
İl Millî Eğitim Müdürlüğü

Sayı : 98258552-604.01.01-E.19786633
Konu : Hacer Kaçar'ın Tez Uygulaması

13.10.2019

MÜDÜRLÜK MAKAMINA

İlgi : Hacer Kaçar 'ın 26/09/2019 tarih ve 18193281 sayıyla kayda alınan dilekçesi.

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü İngiliz Dili Eğitimi Anabilim Dalında yüksek lisans öğrencisi Hacer KAÇAR' ın hazırladığı "ELT teachers' Perceptions on 21 st Century Learning and Innovation Skills in EFL Classes (İngilizce 'nin Yabancı Dil Olarak Öğretildiği Sınıflarda 21.Yüzyıl Öğrenme ve Yenilik Becerileri Üzerine İngilizce Öğretmenlerinin Görüşü" başlıklı araştırma çalışmasını Müdürlüğümüze bağlı yazı ekindeki listede belirtilen okullarda uygulamak istediği ile ilgili ilgi yazı ekte sunulmuştur.

Söz konusu uygulama çalışmasının, Müdürlüğümüze bağlı belirtilen kurumda 2019/2020 eğitim-öğretim yılında, eğitim-öğretimin aksatılmasına mahal vermeden gönüllülük esasına göre yapılması Müdürlüğümüzce uygun görülmektedir.

Makamlarınızca da uygun görülmesi halinde olurlarınıza arz ederim.

Kazim BARAN
Müdür a.
Müdür Yardımcısı

OLUR
13.10.2019

Veysel DURGUN
Vali a.
Millî Eğitim Müdürü



T.C.
SEYHAN KAYMAKAMLIĞI
İlçe Milli Eğitim Müdürlüğü

Sayı : 71071857-604.01.01-E.20368708
Konu :Hacer Kaçar'ın Uygulama İzni

18.10.2019

DAĞITIM YERLERİNE

İlgi : İl Milli Eğitim Müdürlüğünün 18.10.2019 tarihli ve 20317702 sayılı yazısı.

Çukurova Üniversitesi Sosyal Bilimler Enstitüsü İngiliz Dili Eğitimi Anabilim Dalında yüksek lisans öğrencisi Hacer Kaçar'ın " ELT teachers' Perceptions on 21 st Century Learning and Innovation Skills in EFL Callsses (İngilizce'nin Yabancı Dil Olarak Öğretildiği Sınıflarda 21.Yüzyıl Öğrenme ve Yenilik Becerileri Üzerine İngilizce Öğretmenlerinin Görüşü)" konulu uygulama çalışmasını okulunuzda yapmak isteğinin uygun görüldüğü ile ilgili Müdürlük Makamının 13.10.2019 tarih ve 19786633 sayılı oluru, İl Milli Eğitim Müdürlüğünün ilgi yazısı ekinde ekte gönderilmiştir.

Söz konusu uygulama çalışmasının okul/kurum müdürlerinin denetim , gözetim ve sorumluluğunda , 2019-2020 eğitim-öğretim yılında eğitim öğretim aksatılmadan ve gönüllülük esasına göre uygulanması hususunda;

Bilgi ve gereğini rica ederim.

F.Nevin TEKSOY
Müdür a.
Şube Müdürü

Ek:

- 1-Olur ve Yazı Örneği (2 sayfa)
- 2-Antek Formu ve Ekleri (7 sayfa)

Dağıtım: Tüm Resmi İlkokul/Ortaokul ve Lise Müdürlüğüne

Appendix 4. Approval document of Ethics committee, Çukurova University

Tarih ve Sayı: 25/10/2019-E.155032



T.C.
ÇUKUROVA ÜNİVERSİTESİ
 Sosyal Bilimler Enstitüsü Müdürlüğü



Sayı : 75137396-604.02.02/
 Konu : Etik Kurul Onay Belgesi

YABANCI DİLLER EĞİTİMİ BÖLÜM BAŞKANLIĞINA

İlgi : 30/09/2019 tarihli, 138683 sayılı ve "Bilimsel Araştırma Proje Hk" konulu yazı,

İlgi yazınız ekinde Enstitümüz Müdürlüğüne gönderilen ve Doç.Dr. Hasan BEDİR'in danışmanlığını yürüttüğü İngiliz Dili Eğitimi Anabilim Dalımız yüksek lisans öğrencisi Hacer KAÇAR'ın "ELT Teachers' Perceptions on 21st Century Learning and Innovation Skills in EFL Classes (İngilizce'nin Yabancı Dil Olarak Öğretildiği Sınıflarda 21. Yüzyıl Öğrenme ve Yeniliklik Becerileri Üzerine İngilizce Öğretmenlerinin Görüşleri)" başlıklı yüksek lisans tez projesi kapsamında çalışması için "**Etik Kurul Onay Belgesi**" ekte sunulmuştur.

Gereğini bilgilerinize rica ederim.

e-imzalıdır

Doç.Dr. Hüseyin GÜLER
 Enstitü Müdürü V.

Ek: Etik Kurul Onay Belgesi

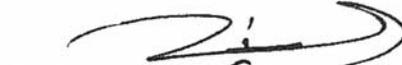
Çukurova Üniversitesi Sosyal Bilimler Bilimsel Araştırma ve Yayın Etiği Kurulu
Toplantı Tutanağı
Toplantı Tarihi: 17 Ekim, saat 12.00
Toplantı Yeri: İşletme Bölümü Toplantı Salonu

Eğitim Fakültesi, Okul Öncesi Eğitimi Bölümü Öğretim Üyesi Doç. Dr. Hasan BEDİR' in danışmanı bulunduğu yüksek lisans öğrencisi Hacer KAÇAR tarafından hazırlanan "ELT teachers' Perceptions on 21 st Century Learning and Innovation Skills in EFL Classes (İngilizce'nin Yabancı dil Olarak Öğretildiği Sınıflarda 21. Yüzyıl Öğrenme ve Yenilik Becerileri Üzerine İngilizce Öğretmenlerinin Görüşleri" başlıklı yüksek lisans çalışmasını Adana İlindeki İngilizcenin yabancı dil olarak öğretildiği sınıflarda yapacağından söz konusu çalışma için "etik komisyon raporu" hazırlanmasına esas olmak üzere Doç. Dr. Gülden TUM'un çalışmanın içerik ve yöntem kapsamında hazırladığı rapor incelendi.

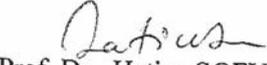
Sonuçta; çalışmanın etik açıdan bir sakınca taşımadığı, "Çukurova Üniversitesi Bilimsel Araştırma ve Yayın Etiği Yönergesi" hükümlerine uygun olduğu kanaatine varılarak, bu belgenin "Etik Kurul Onay Belgesi" olarak verilmesine, toplantıya katılan üyelerimizin oy birliği ile karar verildi.



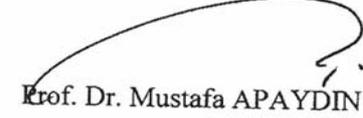
Prof. Dr. Serap ÇABUK(Kurul Başkanı)



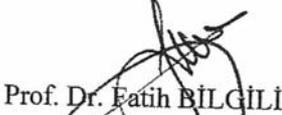
Prof. Dr. Nuran ÖZTÜRK(Kurul Başkan Yar.)



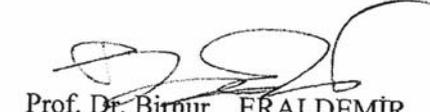
Prof. Dr. Hatice SOFU



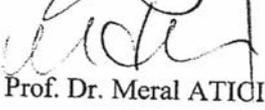
Prof. Dr. Mustafa APAYDIN



Prof. Dr. Fatih BİLGİLİ



Prof. Dr. Birnur ERALDEMİR



Prof. Dr. Meral ATICI

CURRICULUM VITAE**Name surname** : Hacer KAÇAR**Mobile** : 506 4576736**Email** : hacerkacar6@gmail.com**Address** : Mahfesiğmaz Mah. 79086 Sokak No: 4 Esmâ Apt. Kat: 7 Daire: 14
Çukurova/Adana**DATE & PLACE OF BIRTH:** 05. 11. 1983 / MALATYA

OBJECTIVES :The basic premise of being a language teacher is to be able to transfer my knowledge and culture-related experience to my students in the way they would both learn and have fun. As a committed teacher, I aim to offer student-centered teaching by providing them with many developmental opportunities. With those informed, relevant and stimulating opportunities, my purpose is to raise my students' understanding of learning the language and increase their awareness of using the target language further by alternative perspectives. Thus, my overall aim is to promote my learners' quality by training myself at the same time

EDUCATION : **MA (Master's Degree):** Çukurova University, Adana / TURKEY

Faculty of Education, Department of Foreign Languages

English Language Teaching

Date of Graduation: September 2018 - continuing

Bachelor's Degree: Middle East Technical University, Ankara /
TURKEY

Faculty of Education, Department of Foreign Languages

English Language Teaching

Date of Graduation: January 2006

CumGPA: 3.73**High School:** Anatolian Fine Arts High School, Malatya / TURKEY

Date of Graduation: June 2001

PREVIOUS JOB**EXPERIENCES : Toros Primary School, Adana / TURKEY**

English Language Teacher, 2014 – still continuing

Mustafa Erman Middle School (Gaziantep, TURKEY)

English Language Teacher, 2011– 2014

Mütercim Asım Primary School, (Gaziantep, TURKEY)

English Language Teacher, 2009– 2011

Güzelvadi Primary School (Gaziantep, TURKEY)

English Language Teacher, 2007 – 2009

Linaker Primary School (Southport / ENGLAND)

English Language Teaching, October 2006 - June 2007

Supported by European Union Education Program, I worked as an English Teacher in England for 8 months

LAST PROJECTS : (UNDER LIFELONG LEARNING PROGRAM):

Coordinator Teacher, hosting COMENIUS Assistant from Italy
September 2009 – 2010

CERTIFICATES : UK National Agency, Edinburgh, SCOTLAND

Certificate of Meeting in Edinburgh (Scotland) organized by the UK National Agency for Comenius assistants to schools and colleges in the United Kingdom on 26th and 27th October 2006.

Certificate of ELT Conference on ‘Cracking Creativity and Budgeting Time’ by Seçkin Private Schools, March 26, 2011.

Certificate of International Conference on ‘International Migration and Mobility:

Multicultural societies seeking solutions in a globalized world’ by Çukurova University, March 21, 2019.

ACADEMIC**STUDIES : Presentation of a paper titled ‘Intercultural Sensitivity in EFL Classrooms: Insights of**

English Language Teachers in Turkey’ at the 5th Çukurova International ELT Teachers (CUELT) Conference.

FOREIGN LANGUAGE**KNOWLEDGE** : **English: Advanced****COMPUTER SKILLS:**

MS Office Programs (Word, Excel, PowerPoint) – Excellent
Internet Applications – Excellent

INTERESTS

: Music related activities, Turkish folk music and dances
Theatre and cinema
Taking part in cultural studies
Taking part in international organizations

REFERENCES:

Prof. Dr. Gölge SEFEROĞLU, Department of English
Language Education, Middle East Technical University /
ANKARA
Phone: + 90 312 210 -4074

Prof. Dr. Hasan BEDİR, Department of English Language
Education, Çukurova University / ADANA
Telefon: 0 532 7066611