



T.R.

AKDENİZ UNIVERSITY

INSTITUTE OF EDUCATIONAL SCIENCES

DEPARTMENT OF FOREIGN LANGUAGE EDUCATION

**MA
THESIS**

**PREPARATORY CLASS ENGLISH AS A FOREIGN
LANGUAGE TEACHERS' PRACTICES AND SELF-EFFICACY
BELIEFS ON TEACHING 21ST-CENTURY SKILLS IN
CLASSROOMS**

SİNEM BİLBEN

**ENGLISH LANGUAGE TEACHING
MASTER'S PROGRAM**

Antalya, 2022



T.C.

AKDENİZ UNIVERSITY

INSTITUTE OF EDUCATIONAL SCIENCES

DEPARTMENT OF FOREIGN LANGUAGES

ENGLISH LANGUAGE TEACHING THESIS MASTER'S PROGRAM

**PREPARATORY CLASS ENGLISH AS A FOREIGN LANGUAGE TEACHERS'
PRACTICES AND SELF-EFFICACY BELIEFS ON TEACHING 21ST-CENTURY
SKILLS IN CLASSROOMS**

MASTER'S THESIS

Sinem Bilben

Thesis Supervisor:

Assoc. Prof. Dr. Hüseyin KAFES

Antalya, 2022



T.C.
AKDENİZ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ
YABANCI DİLLER ANABİLİM DALI
İNGİLİZ DİLİ EĞİTİMİ TEZLİ YÜKSEK LİSANS PROGRAMI

**İNGİLİZCE HAZIRLIK SINIFI ÖĞRETİM ELEMANLARININ 21. YÜZYIL
BECERİLERİNİN ÖĞRETİMİNE YÖNELİK SINIF İÇİ UYGULAMALARI VE
ÖZYETERLİK ALGILARI**

YÜKSEK LİSANS TEZİ

Sinem Bilben

Danışman:

Doç. Dr. Hüseyin KAFES

Antalya, 2022

T.C.
AKDENİZ ÜNİVERSİTESİ
EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

Sinem BİLBEN'in bu çalışması 20.01.2022 tarihinde jürimiz tarafından **Yabancı Diller Eğitimi** Anabilim Dalı İngilizce Eğitimi Tezli Yüksek Lisans Programında **Yüksek Lisans Tezi** olarak **oy birliği** ile kabul edilmiştir

İMZA

Başkan	: Doç. Dr. Mustafa CANER Akdeniz Üniversitesi Eğitim Fakültesi Yabancı Diller Eğitimi İngiliz Dili ve Eğitimi	
Üye	: Dr. Öğretim Üyesi Meral Çapar Anadolu Üniversitesi Eğitim Fakültesi Yabancı Diller Eğitimi İngiliz Dili ve Eğitimi	
Üye (Danışman)	: Doç. Dr. Hüseyin KAFES Akdeniz Üniversitesi Eğitim Fakültesi Yabancı Diller Eğitimi İngiliz Dili ve Eğitimi	

YÜKSEK LİSANS TEZİNİN ADI: PREPARATORY CLASS ENGLISH AS A FOREIGN LANGUAGE TEACHERS' PRACTICES AND SELF-EFFICACY BELIEFS ON TEACHING 21ST-CENTURY SKILLS IN CLASSROOMS

ONAY: Bu tez, Enstitü Yönetim Kurulunca belirlenen yukarıdaki jüri üyeleri tarafından uygun görülmüş ve Enstitü Yönetim Kurulunun tarihli ve sayılı kararıyla kabul edilmiştir.

Prof. Dr. Cengiz TOKER
Enstitü Müdür V.

DOĞRULUK BEYANI

Yüksek lisans tezi olarak sunduğum bu çalışmayı, bilimsel ahlak ve geleneklere aykırı düşecek bir yol ve yardıma başvurmaksızın yazdığımı, yararlandığım eserlerin kaynakçalardan gösterilenlerden oluştuğunu ve bu eserleri her kullanışında alıntı yaparak yararlandığımı belirtir; bunu onurumla doğrularım. Enstitü tarafından belli bir zamana bağlı olmaksızın, tezimle ilgili yaptığım bu beyana aykırı bir durumun saptanması durumunda, ortaya çıkacak tüm ahlaki ve hukuki sonuçlara katlanacağımı bildiririm.

21/01/2022

Sinem Bilben



ACKNOWLEDGMENTS

I would like to express my gratitude to the valuable people who have supported and encouraged me during this challenging journey.

First and foremost, I would like to acknowledge and give my warmest thanks to my thesis supervisor Assoc. Prof. Dr. Hüseyin KAFES for his invaluable advice, kind personality, continuous support, trust in me, and patience during my MA study. He was always there to answer my questions, keep me motivated when I felt lost, and share his immense knowledge. Thanks to his constant encouragement and help, I could accomplish this study.

I would like to thank my defense committee members, Assoc. Prof. Dr. Mustafa CANER and Asist. Prof. Dr. Meral ÇAPAR for their brilliant comments and suggestions. I would also like to express my sincere gratitude to Assoc. Prof. Dr. Mustafa CANER for his invaluable guidance, suggestions, and encouragement throughout my study and his enjoyable classes and contributions during my graduate education.

I would also like to offer my special thanks to my valuable lecturers at Akdeniz University, Prof. Dr. Binnur GENÇ İLTER and Assoc. Prof. Dr. Fatma Özlem SAKA for their contribution to my academic, professional, and daily life. I have learned a lot from them throughout my graduate education. Their teaching style and enthusiasm for their class made a strong impression on me, and I have always carried positive memories of their classes with me.

I am grateful the participants who volunteered in this study for their valuable time, sincere answers, and great contribution. Without their collaboration, I wouldn't be able to accomplish this study.

I am deeply grateful to my dearest friends Eylül AKSOYAN, Ayperi SAL, Kübra USLU, Duygu DÖNER, Dicle KAYA, Şule DEDE, and Büşra GÜREL for their immense support, encouragement, and trust in me. I owe my special thanks to my valuable friend Onat KUTU for his great support and help in finding the participants of this study. I would also like to offer my special thanks to my dear classmate and colleague Çisem İNANÇ and Kerime ASMA for their support, valuable suggestions, and answering all my questions regarding my study and legal procedures.

Last but not least, I would like to express my very profound gratitude to my parents Sabiha BİLBEN, İrfan BİLBEN, my sister Gizem GÜRPINAR, and her husband Kadir GÜRPINAR for their endless support, trust in me, and understanding during this journey. I also thank my parents for raising me as a strong independent woman, and my sister for being there whenever I need and giving me strength and endurance. I am proud of them.

Sinem BİLBEN



ABSTRACT

PREPARATORY CLASS ENGLISH AS A FOREIGN LANGUAGE TEACHERS’ PRACTICES AND SELF-EFFICACY BELIEFS ON TEACHING 21st-CENTURY SKILLS IN CLASSROOMS

BILBEN, Sinem

Master of Arts, Department of Foreign Language Education

Thesis Supervisor: Assoc. Prof. Hüseyin Kafes

February 2022, 85 pages

The aim of the current study is to investigate the integration of 21st-century skills into English classes by English Language Preparatory Program (ELPP) instructors and their self-efficacy beliefs on teaching and assessing the 21st-century skills. A descriptive survey method was adopted in the study, and single and relational screening research design models were used. The population of the study is ELPP instructors at state and foundation universities in Turkey. The sample was chosen by using self-selection sampling, and the data of the current study were collected with an online survey from 98 ELPP instructors who work in the School of Foreign Languages of 32 universities from 5 different regions of Turkey.

The quantitative data were collected through a 72-item questionnaire developed by Hixson, Ravitz, and Whisman (2012), which consists of a 5-point Likert-type scale and is named 21st-Century Teaching and Learning. The questionnaire, which is in English, investigates eight different skills of 21st-century (Critical thinking skills (CTS), Collaboration skills (CLS), Communication skills (CS), Creativity and Innovation skills (CIS), Self-Direction skills (SDS), Making Global Connections (MGC), Making Local Connections (MLC), and Using Technology as a Tool for Learning (UTFL) under two dimensions consisting of 5-8 classroom practices related to each skill and instructors’ self-efficacy beliefs on teaching and assessing those skills. Independent samples t-tests, one-way analysis of variance, and Pearson correlation analysis were used to answer the research questions of the study.

The results revealed that the participants’ levels of teaching 21st- century skills in English classes and their self-efficacy beliefs on teaching and assessing these skills are at a moderate level. The participants teach “Using Technology as a Tool for Learning” skills the most frequently and also feel the most competent in teaching and assessing this skill, whereas “Local Connections” was found to be the least implemented skill. In addition, the instructors

believe they are more competent in teaching the 21st-century skills than assessing them. Lastly, a positive and moderately strong relationship was found between the participants' levels of each 21st-century skill and their self-efficacy beliefs of teaching and assessing these skills. In summary, the remarkable efforts of ELPP instructors to teach 21st-century skills are insufficient to reach the new generation students both to the competencies determined by the Council of Higher Education and to society 4.0 standards. Frequent use and practice of 21st-century skills in English language preparatory education, which is the first step of higher education and where a global language is taught, will have a significant contribution to helping students reach higher education qualifications and society 4.0 standards.

Keywords: *21st-century skills, ELPP instructors, self-efficacy, creativity, critical thinking, communication, collaboration, self-direction, global and local connections, ICT, Society 4.0*

ÖZET

İNGİLİZCE HAZIRLIK SINIFI ÖĞRETİM ELEMANLARININ 21. YÜZYIL BECERİLERİNİN ÖĞRETİMİNE YÖNELİK SINIF İÇİ UYGULAMALARI VE ÖZ YETERLİK ALGILARI

BİLBEN, Sinem

Yüksek Lisans, Yabancı Dil Eğitimi Ana Bilim Dalı

Tez Danışmanı: Doç. Dr. Hüseyin Kafes

Şubat 2022, 85 sayfa

Bu çalışmanın amacı, İngilizce Hazırlık Programı (ELPP) öğretim elemanlarının 21. yüzyıl becerilerini İngilizce derslerinde ne derece öğrettiğini ve bu becerileri öğretme ve ölçme konusundaki öz yeterlik inançlarını araştırmaktır. Araştırmada betimsel bir yöntem benimsenmiş ve ilişkisel tarama araştırma deseni kullanılmıştır. Araştırmanın evrenini Türkiye'deki devlet ve vakıf üniversiteleri İngilizce Hazırlık departmanı öğretim üyeleri oluşturmaktadır. Örneklem kendinden seçmeli örnekleme yöntemiyle seçilmiş olup, mevcut çalışmanın verileri Türkiye'nin 5 farklı bölgesinden 32 üniversitenin Yabancı Diller Yüksekokulunda görev yapan 98 öğretim üyesinden çevrimiçi anket yoluyla toplanmıştır.

Nicel veriler, Hixson, Ravitz ve Whisman (2012) tarafından geliştirilen, 5'li Likert tipi bir ölçekten oluşan, 21. Yüzyıl'da Öğretme ve Öğrenme Anketi (standardized alpha > .90, inter-item correlations > .58) aracılığı ile toplanmıştır. Anket 8 bölüm (Kritik düşünme, İş birliği, İletişim, Yaratıcılık ve Yenilik, Öz yönlendirme, Küresel Bağlantılar Kurma, Yerel Bağlantılar Kurma, Teknolojiyi Öğrenme Aracı Olarak Kullanma), toplam 72 ifadeden oluşmaktadır. Her bölüm kendi içerisinde 2 alt bölümden (ilgili beceriyi öğretme uygulamaları ve bunları kazandırmaya dair öz yeterlik algıları ile ilgili maddeler) oluşmaktadır. Araştırma sorularını yanıtlamak için bağımsız örneklemler t testi, tek yönlü varyans analizi (ANOVA) ve Pearson korelasyon analizi kullanılmıştır.

Sonuçlar, katılımcıların İngilizce derslerinde 21. yüzyıl becerilerini öğretme düzeylerinin ve bu becerileri öğretme ve ölçmeye yönelik öz yeterlik inançlarının orta düzeyde olduğunu ortaya koymuştur. Ayrıca katılımcıların “Teknolojiyi Öğrenme Aracı Olarak Kullanma” becerisini en sık öğrettiği ve bu beceriyi öğretme ve ölçme konusunda kendilerini en yetkin hissettikleri saptanmıştır. En az öğretilen becerinin ise “Yerel Bağlantılar Kurma”

olduđu tespit edilmiştir. Buna ek olarak, öğretim elemanları 21. Yüzyıl becerilerini öğretme konusunda, bu becerileri ölçmeye oranla daha yetkin olduklarına inanmaktadırlar. Ayrıca, katılımcıların her bir 21. yüzyıl becerisine ilişkin öğretim düzeyleri ile bu becerileri öğretme ve ölçmeye yönelik öz yeterlik inançları arasında pozitif yönde ve orta düzeyde güçlü bir ilişki bulunmuştur. Özetle, İngilizce hazırlık öğretim elemanlarının 21. Yüzyıl becerilerini öğretme konusunda gösterdikleri kayda değer çaba, yeni nesil öğrencileri hem Yüksek Öğretim Kurulunun belirlediği yeterliklere hem de toplum 4.0 standartlarına ulaştırmada yetersiz kalmaktadır. Yüksek öğretimin ilk basamağı olan ve küresel bir dilin öğretildiği İngilizce hazırlık eğitiminde 21. Yüzyıl becerilerinin sıklıkla kullanılması ve pekiştirilmesi öğrencileri yüksek öğretim yeterliklerine ve toplum 4.0 standartlarına ulaştırmada önemli bir katkıya sahip olacaktır.

Anahtar Kelimeler: *21. yüzyıl becerileri, İngilizce hazırlık, öğretim görevlileri, öz-yeterlik, yaratıcılık, eleştirel düşünme, iletişim, iş birliği, öz-yönelim, küresel ve yerel bağlantılar, BİT okuryazarlığı, Toplum 4.0*

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
ABSTRACT	v
ÖZET	vii
TABLE OF CONTENTS	ix
LIST OF TABLES	xi
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii

CHAPTER I

INTRODUCTION

1.1. Introduction	1
1.2. Background of the Study	1
1.3. Statement of the Problem	2
1.4. The Purpose of the Study	4
1.5. Research Questions	4
1.6. The Significance of the Study	4
1.7. Assumptions of the Study.....	6
1.8. Limitations.....	6

CHAPTER II

LITERATURE REVIEW

2.1. Introduction	7
2.2. 21st-Century Teaching and Globalization.....	7
2.3. 21st-Century Skills Frameworks	10
2.3.1. Critical Thinking	13
2.3.2. Collaboration	15
2.3.3. Communication	16
2.3.4. Creativity	16
2.3.5. Self-direction	17
2.3.6. Global and Local Connections	18
2.3.7. Using Technology as a Learning Tool	19
2.4. Assessing 21st-Century Skills	20
2.5. Self-Efficacy.....	21
2.6. Related Studies	23

CHAPTER III

METHODOLOGY

3.1. Introduction	26
3.2. Research Method	26
3.3. Participants and sampling	27
3.4. Data Collection Tools	28
3.4.1 Demographic Information Form	28
3.4.2. 21st-Century Teaching and Learning Survey	29
3.5. Data Collection Procedure	29
3.6. Data Analysis	30

CHAPTER IV

FINDINGS

4.1. Introduction	31
4.2. The Results	31

CHAPTER V

CONCLUSION, DISCUSSION AND SUGGESTIONS

5.1.Introduction	47
5.2.Discussion	47
5.3.Conclusion	52
5.4.Pedagogical Implications and Suggestions for Further Research	53

REFERENCES	54
-------------------------	-----------

APPENDICES	63
-------------------------	-----------

ÖZGEÇMİŞ	83
-----------------------	-----------

BİLDİRİM	84
-----------------------	-----------

İNTİHAL RAPORU	85
-----------------------------	-----------

LIST OF TABLES

Table 1. Expected changes from education in the industrial society to education in the information (Pelgrum, Collis, Janssen (1997) cited in Pelgrum (2001), p.164).....	9
Table 2. Examples of 21st-century Skills Frameworks.....	10
Table 3. The Distribution of Universities and Participants by Region, Type of Institution, Academic Degree, and the Year of Experience in the School of Foreign Languages	27
Table 4. Results of Normality Tests for the Distribution of Data	32
Table 5. Demographic Information of the Participants in the Research	33
Table 6. Descriptive Statistics for the Sub-Dimensions of 21st-century Skills Teaching and Learning Scale	34
Table 7. Descriptive Statistics of the Teaching Practices in the Sub-dimensions of 21st-century Skills Teaching and Learning Scale	35
Table 8. Findings on the Differences in the participant's Levels of Teaching 21st-century Skills depending on their previous knowledge about 21st-century teaching/skills.....	38
Table 9. Findings on of the Differences in the Levels of Teaching 21st-century Skills of the Participants by Education Levels	39
Table 10. Findings on The Differences in the Levels of Teaching 21st-century Skills of the Participants Depending on the Percentage of Course Hours Allocated to Projects/Assignments which Require One Week or More Preparation Time	40
Table 11. Findings on the Differences in the Levels of Teaching 21st-century Skills of the Participants by the Years of Experience.....	42
Table 12. Descriptive Statistics of the Self-Efficacy Beliefs Sub-Dimension of 21st-century Skills Teaching and Learning Scale	43
Table 13. Descriptive Statistics of the Items in Self-Efficacy Beliefs Sub-Dimension in 21st-century Skills Teaching and Learning Scale	44
Table 14. Results of Correlational Analysis of the participants' levels of teaching 21st-Century Skills and Self-efficacy Beliefs on Teaching and Assessing these Skills	45

LIST OF FIGURES

Figure 1. 21st-century Learning Balance by Fadel and Trilling (2009, p.38).....	8
Figure 2. Core areas and components of critical thinking skills (CLCF,2020).....	14
Figure 3. Core areas and components of collaboration skills (CLCF,2020)	15
Figure 4. Core areas and components of communication skills (CLCF,2020)	16
Figure 5. Core areas and components of creative thinking skills (CLCF,2020)	17
Figure 7. Core areas and components of social responsibility skills (CLCF,2020)	19
Figure 8. The phases of ATC21S project (Griffin et al., 2010).....	20
Figure 9. Integrated Assessment System (Binkley et al.,2012).....	20

LIST OF ABBREVIATIONS

ATC21S	: Framework for Assessment and Teaching of 21st-century Skills
CIS	: Creativity and Innovation Skills
CL	: Collaboration
CLCF	: The Cambridge Framework for Life Competencies in Education
CLS	: Collaboration Skills
CoHE	: Council of Higher Education
CS	: Communication Skills
CT	: Critical Thinking
CTS	: Critical Thinking Skills
ELPP	: English Language Preparatory Program
EQF	: European Qualifications Framework
ICT	: Information and Communication Technology
MGC	: Making Global Connections Skills
MLC	: Making Local Connections Skills
NQF-HETR	: National Qualifications Framework for Higher Education in Turkey
OECD	: Economic Development and Cooperation Organization
P21	: Partnership for 21st-century Learning
QF-EFEA	: Qualifications Framework for the European Higher Education
SDS	: Self Direction Skills
THEQC	: Turkish Higher Education Quality Council
UTFL	: Using Technology as a Tool for Learning

CHAPTER I

INTRODUCTION

1.1. Introduction

In this chapter, the statement of the problem, the purpose of the study, the significance of the study, research questions, assumptions of the study, and limitations are explained.

1.2. Background of the Study

The developing technology in the 21st-century has brought along many social, cultural, and economic changes, causing the industrial society to evolve into the information society (Balay, 2004; Toffler, 1980). A lot has changed since the industrial age, as well as the needs of our society. Technology helps us meet those needs by driving humanity into a digital world, where making connections and keeping in contact, thinking, learning, and working in teams are more integrated and powerful thanks to digital tools that make information easier to access, store, analyze, manage, and even create (Fadel & Trilling, 2009). These changes have also led to developments in the field of education. While the concept of "teaching" is at the forefront in the industrial society, the concept of "learning" has come to the fore in the information society (Balay, 2004; Tatlıdil & Günder, 2013).

Costan et al. (2021) state that the Fourth Industrial Revolution (4IR) emerged after the developments in wearable technology and artificial intelligence (AI), which changed the needs of the labor market and hence the development of Education 4.0. Learning management software, virtual learning environments, and communication tools are some of the technologies Education 4.0 uses (Velinova-Sokolova, 2021). Education 4.0 is more skills-based, personalized, flexible, and accessible (Costan et al., 2021). Salmon (2019) asserts that higher education institutions should adapt their vision to the requirements of Education 4.0 by primarily focusing on design thinking and multidisciplinary studies and constructing new educational futures and departments. The unexpected outbreak of Covid-19 accelerated the use of Education 4.0 tools in 2020 as distant education was a must. Although available technologies helped a lot to adapt the education into online setting, it also served many difficulties and technical problems. At that point, human skills such as creativity and critical thinking were

required to overcome such difficulties. Accordingly, Salmon (2019) discerns that the most valued skills in the future will be creativity, critical thinking, communication, and collaboration since artificial intelligence is not capable of having these skills yet.

For a better future, 4.0 citizens need to develop their cognitive, metacognitive, and social skills. Hixson et al. (2012) list 21st-century skills as critical thinking, collaboration, creativity and innovation, communication, self-direction, making global and local connections, and using technology as a tool for learning. These 21st-century skills are also highly valued and integrated into the qualifications frameworks for higher education in many institutions and countries to raise better citizens. Higher education is one of the most important stages of one's education life, and many people discover their aims, wishes, and life and career plans at this stage. Higher education would be dysfunctional if it did not encourage learners to develop their 21st-century skills. However, the level of universities' teaching and encouraging learners to use these skills is still a question.

1.3.Statement of the Problem

The education in the information age aims to raise creative and innovative individuals instead of teaching the knowledge, teaching how to learn and access information gains importance which is also called as learning to learn (Bedir, 2019; Çalık & Sezgin, 2005; Harlow, 1949). Saygılı (2013) argues that it is unrealistic to meet the demands of the 21st-century and the future with traditional teachers who only teach the knowledge and are not creative and innovative because this approach does not advocate the idea that individuals are unique and creative beings. That is why it is prominent for teachers to shift their teaching from teacher directed to student directed where 21st-century skills are encouraged and integrated into English classes.

On the other hand, according to Higher Education Evaluation and Quality Assurance Annual Situation Report 2018-2019 (Turkish Higher Education Quality Council (THEQC), 2019), internal and external evaluations shows that student-centered learning, teaching, and assessment practices are not mature yet or not mature enough to cover all areas, except for a few institutions. Furthermore, studies to make the qualifications of fields of education compatible with the Qualifications Framework for the European Higher Education (QF-HETR) are still in process. Güneş (2012) states that the learning outcomes of QF-HETR and the learning outcomes of most universities in Turkey are still not compatible with each other, as the outcomes are mainly related to knowledge rather than skills and competencies. In addition,

instructors mostly teach knowledge with traditional approaches and methods and implement knowledge-based assessments in actual classes (Güneş, 2012).

Within the scope of the National Qualifications Framework for Higher Education in Turkey (NQF-HETR) (CoHE,2010), the skills that individuals who receive undergraduate education in Turkey should acquire at the end of the program include:

- having theoretical and factual information in their field,
- using this information,
- working independently,
- taking responsibility for solving complex and unpredictable problems,
- thinking critically,
- being able to make decisions on their own learning and to direct their learning,
- using information technologies,
- communicating effectively,
- having social responsibility skills, adapting to social, scientific, cultural, and ethical values, etc.

How well these skills are encouraged by higher education institutions and taught in classes by instructors is quite essential in terms of determining the quality of higher education because it is unrealistic to expect learners to acquire those skills, which also match with the 21st-century skills given in Partnership for 21st-century Learning (P21, 2019), without being taught first. Most students start their university life mainly in English language preparatory programs. In these programs, learners read and listen about many different topics related to various aspects of life, discuss local and global issues, share personal experiences, work on different tasks. Moreover, current English coursebooks integrate 21st-century skills into their syllabuses, such as Unlock from Cambridge University Press and Pathways from National Geographic Learning. In short, it can be said that English language learning is a great setting in terms of practicing 21st-century skills.

In this respect, the main problem of this research is to determine the level of 21st-century skills that are taught and assessed in English classes by English Language Preparatory Program (ELPP) instructors who work in School of Foreign Languages in Turkey and how competent they feel in teaching and assessing the 21st-century skills.

1.4. The Purpose of the Study

The purpose of the current study is to investigate the integration of 21st-century skills into English classes by ELPP instructors and their self-efficacy beliefs on teaching and assessing these skills. Furthermore, this study aims to find out practices frequently used to teach 21st-century skills in English classes, as well as exploring the relationship between the levels of teaching those skills and instructors' self-efficacy beliefs.

1.5. Research Questions

To reach the aim of the study, eight research questions below were examined in the study.

1. To what extent do ELPP instructors teach 21st-Century Skills in their classes?
2. What practices of 21st-Century Skills do ELPP instructors teach more frequently in their classes?
3. Is there a statistically significant difference in ELPP instructors' teaching 21st-century skills based on their socio-demographic characteristics (previous knowledge about 21st-century skills, level of education, years of experience, the percentage of course hours allocated to assignments/projects/research that required one week or more preparation time)?
4. To what extent do ELPP instructors feel competent in teaching and assessing the 21st-Century skills?
5. Is there a statistically significant relationship between the extent to which participants teach 21st-Century Skills in their classes and their self-efficacy levels of teaching and assessing those skills?

1.6. The Significance of the Study

According to NQF-HETR (CoHE,2010), competences in the 6th Cycle, which is equivalent to Bachelor's, includes having theoretical and conceptual knowledge in their field of study, being able to use those skills in their expertise, taking responsibility in teams and working independently, deciding on learning needs and directing the learning, having social and global responsibility, using ICT at a minimum level, having skills such as interpreting and evaluating data, defining and analyzing problems, and solving problems etc. It is expected for individuals who earn a bachelor's degree to gain these competencies. English Language

Preparatory Program (ELPP) is the first step of university education for many students who will start their 6th cycle journey. ELPP is a bridge between high school and university. Thus, it is important to integrate these skills into English classes, which will help learners to get prepared for 6th cycle and adapt to university life at the very beginning.

The related literature shows a great body of research in exploring students' and teachers 21st-century skills (Altunkaya & Çelik, 2021; Aydın & Tan Şişman, 2021; Bedir, 2019; Eryılmaz, 2020; Karalı & Aydemir, 2020; Nazikian & Park, 2016; Tican & Deniz, 2019; Yıldırım & Ortak, 2021). However, there is little research on teaching and assessing those skills in the classroom environment, especially in Turkey (Otlı,2020). In terms of improving the quality of teaching English and raising 4.0 citizens, it is prominent to teach 21st-century skills in classes explicitly because it is not reasonable to expect students to acquire those skills by the end of their bachelor's study without being taught first. Consequently, it is important to investigate instructors' in-class practices related to 21st-century Skills in determining the quality of education in universities, as well as the compatibility with 21st-century education. It is also important to investigate the self-efficacy beliefs of instructors on teaching and assessing those skills, as the ones who have high self-efficacy see difficult tasks as challenges to overcome whereas people with low self-efficacy see them as threats to be avoided (Bandura,1994). Moreover, this will provide a better understanding of the extent to which 21st-century skills are integrated into English classes in terms of determining the strengths and weaknesses in teaching those skills.

The current study will contribute to the available research in 21st-century education. In addition, exploring the practices in and self-efficacy beliefs of instructors on teaching and assessing 21st-century skills will provide more insight and awareness to the instructors especially those who do not have any knowledge about 21st-century skills and education. Knowing about 21st-century education can provide teachers some advantages such as keeping up with the modern teaching methods, understanding their learners better, and meeting the needs of 4.0 society. In this context, it is predicted that this study will be useful in closing the gap in the field, making the instructors think about their own teaching and discovering their self-efficacy beliefs about the teaching of 21st-century skills. Kumaravadivelu (2001) argued that teachers who think about their own teaching, realize the strengths and weaknesses of their teaching, and make efforts to improve them have positive effects on students' success levels. Accordingly, instructors of English may take action to adapt their teaching to Education 4.0 better by rethinking on the strengths and weaknesses of their teaching. In this direction, it is thought that this study is expected to increase the quality of teaching and learning. Moreover,

this study might contribute to institutions and curriculum developers in terms of integrating the 21st-century skills and related practices into the English language curriculum.

1.7. Assumptions of the Study

It is postulated that the participants give accurate and sincere answers to the questions asked in the questionnaire.

1.8. Limitations

There are four significant limitations to the current study which explores the integration of 21st-century skills in English Preparatory classes and the self-efficacy beliefs of instructors on teaching and assessing those skills. These limitations are:

1. The study is limited to 98 ELPP instructors working in 32 different universities in Turkey. The number of instructors participated in the study from each university is not equal. For this reason, no comparison between the universities is done in the study.
2. The questionnaire used in the study was conducted during the COVID-19 pandemic between January-May 2021, so it is highly possible that the answers given to the questionnaire might be affected by the online education circumstances.
3. The data collection tool used in the study is limited to the online survey developed by Hixson et al. (2012). For this reason, only quantitative analysis can be done with the data collected.
4. As the sample of the study was taken from various universities in Turkey, the results of the study cannot be generalized to ELPP instructors working in different countries.

CHAPTER II

LITERATURE REVIEW

2.1. Introduction

This chapter presents the theoretical background of the current study focusing on 21st-century skills. The following topics are discussed: 21st-Century Teaching and Globalization, 21st-Century Skills Frameworks, Critical Thinking, Collaboration, Communication, Creativity, Self-direction, Making Global and Local Connections, Using Technology as a Learning Tool, Assessing the 21st-Century Skills, Self-efficacy, and Related Studies.

2.2. 21st-Century Teaching and Globalization

Change is inevitable in every aspect of life. The behaviors and the functioning of civilizations have always changed throughout the ages. Toffler (1980) classifies the chronology of changes in civilizations in 3 waves: the first wave is the agricultural age, the second wave is the industrial age, and the third wave is the information age. While the industrial age had affected by the industrial revolution in the 18th century and evolved in decades, the information age started to build its foundations after World War II, and it is still evolving. Toffler (1980) highlights that though there are some certain events which lead these revolutions to happen, different countries and communities experience these civilizational changes at different paces and under different circumstances. Even some countries may feel the effects of more than one wave at the same time which may cause conflicts and makes the understanding of changes harder (Toffler,1980). Çalık and Sezgin (2005) explain that education and globalization are interrelated since globalization promotes developments in education, hence globalization, so it is concluded that the quality of global communication, the economic well-being and the future of the societies depend mostly on education.

Access to any kind of information has become much easier in the information age and that convenience led to an infinite amount of information on the Internet. Consequently, it is no longer possible to memorize every fact and knowledge that exists in the 21st-century unlike the past where memorization of facts was fostered (Fadel & Trilling, 2009). Bassendowski and Petrucka (2013) say that learners in the past were expected to sit quietly and take notes of tons

of factual knowledge which was overwhelming and boring. However, instead of knowing every fact and knowledge in a field, knowing, and understanding its basics and principles and using them to find solutions to possible problems and questions are more practical and life-long (Fadel & Trilling,2009). Similarly, the 20th-century approached language learning as an academic goal with a focus on grammar and memorization while the 21st-century language teaching and learning promotes using language for communication and globalization (Eaton, 2010). Fadel and Trilling (2009) assert that the one-size-fits-all model of the industrial age is no longer valid for digital natives of our time, as today’s tech-savvy generations need personalized and interactive classes where collaboration and creativity are cultivated. “Digital natives” is a term put forward by Prensky (2001) to name the learners who were born and raised in a world with various types of technologies such as videogames, mobile phones, tablets, digital music players, Internet, and computer.

Learning a second language is no longer enough for having a good career; however, it is crucial to make connections, establish partnerships, and globalize, hence nowadays learning is more collaborative and learner-centered with integration of technology to feed the tech-savvy learners of 21st-century (Eaton, 2010). Thanks to this globalization, knowledge-based teaching of the 20th century has shifted into skills-based teaching where learners are provided opportunities to develop their life and learning skills to solve any task and learn any information by themselves. However, Fadel and Trilling (2009) remind that 21st-century teaching doesn’t abandon the 20th century teaching, but it tries to balance both approaches by blending the skills and the knowledge for each learner to become competent in the related field. Figure 1 illustrates the shift and balance in the learning and teaching between 20th and 21st-century .

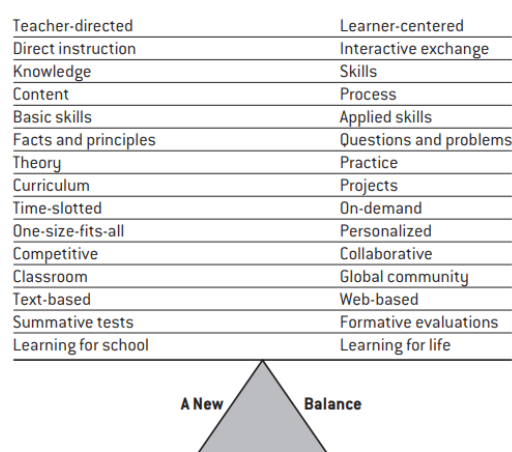


Figure 1. 21st-century Learning Balance by Fadel and Trilling (2009, p.38)

Çalık and Sezgin (2005) point out the need for the schools which are based on the human and global values, which take the learner as center, and teach them the knowledge, skills and behaviors which are essential for the global world. Saygılı (2013) argues that it is unrealistic to meet the demands of 21st-century and the future with traditional teachers who only teach the knowledge and are not creative and innovative because this approach does not advocate the idea that individuals are unique and creative beings. The implementation of those changes is only possible with innovative teachers. Saygılı (2013) describes the modern teacher as an individual who helps others to grow and develop in certain areas in the light of his/her knowledge, manners, and lifestyle. 21st-century teachers do not only provide information but also guide the learners as a mentor and leader (Çalık & Sezgin, 2005). Future professions will require interdisciplinary thinking, and this means that people should not only be flexible to new events and situations, but also be ready to apply their knowledge in different fields (Özgüzel, 2018). Table 1 shows the expected changes from education in the industrial society to education in the information society.

Table 1

Expected changes from education in the industrial society to education in the information (Pelgrum, Collis, Janssen (1997) cited in Pelgrum (2001), p.164)

Actor	Education in the Industrial Society	Education in the Information Society
School	• Isolated from society • Most information on school functioning confidential	• Integrated in society • Information openly available
Teacher	• Initiator of instruction • Whole class teaching • Evaluates student • Places low emphasis on communication skills	• Helps students find appropriate instructional path • Guides students' independent learning • Helps student to evaluate own progress • Places high emphasis on communication skills
Student	• Mostly passive • Learns mostly at school • Hardly any teamwork • Takes questions from books or teachers • Learns answers to questions • Low interest in learning	• More active • Learns at school and outside school • Much teamwork • Asks questions • Finds answers to questions • High interest
Parent	• Hardly actively involved in learning process • No steering of instruction • No life-long learning model	• Very active in learning process • Co-steering • Parents provide model

2.3. 21st-Century Skills Frameworks

Along with the new goals in information age, the skills that the information society person should have in the 21st-century have been researched by many studies and 21st-century skills frameworks have been created (Economic Development and Cooperation Organization (OECD), 2018; European Qualifications Framework (EQF), 2008; National Qualifications Framework for Higher Education in Turkey (NQF-HETR), 2010; Partnership for 21st-century Skills (P21), 2019; The William and Flora Hewlett Foundation Deeper Learning Framework, 2013; Students' 21st-century Skills (ITL/SRI version), 2010 ; Qualifications Framework for the European Higher Education Area(QF-EHEA), 2005; OECD Learning Compass 2030, 2019; Cambridge Framework for Life Competencies in Education, 2018; Framework for Assessment and Teaching of 21st-century Skills (ATC21S), 2020.). In the position paper published by OECD (2018), 21st-century skills are classified as cognitive and meta-cognitive skills, social and emotional skills, and practical and physical skills. On the other hand, the 21st-century Skills Framework (P21,2019) defines the skills in 3 categories which are learning and innovation skills, information, media and technology skills, and life and career skills. Table 2 shows the 21st-century skills determined by different frameworks which have many common points with slight differences.

Table 2

Examples of 21st-century Skills Frameworks

P21's Framework for 21st-century Learning (Battle for Kids, 2019)	OECD Learning Compass 2030 (OECD, 2019)	The William and Flora Hewlett Foundation Deeper Learning Framework (2013)	Students' 21st-century Skills (ITL/SRI version, 2010)
1. Key Subjects & 21st-century Themes - Key subjects: English, reading, or language arts, world languages; arts; mathematics, economics; science; geography; history; government; and civics 21st-century Themes: Global Awareness; Financial, Economic, Business, and Entrepreneurial Literacy; Civic Literacy; Health	1. Core Foundations - Literacy - Numeracy - Data Literacy - Health Literacy - Digital Literacy 2. Competencies - Skills - Cognitive and metacognitive skills (critical thinking, creative thinking, learning-to-learn, and self-regulation)	1. Master core academic content 2. Think critically and solve complex problems 3. Work collaboratively 4. Communicate effectively 5. Learn how to learn 6. Develop academic mindset (added in 2013 version)	1. Knowledge Building 2. Problem-Solving and Innovation 3. Skilled Communication 4. Collaboration 5. Self-Regulation and assessment 6. Use of ICT for Learning

P21's Framework for 21st-century Learning (Battle for Kids, 2019)	OECD Learning Compass 2030 (OECD, 2019)	The William and Flora Hewlett Foundation Deeper Learning Framework (2013)	Students' 21st-century Skills (ITL/SRI version, 2010)
Literacy; Environmental Literacy 2. Learning & Innovation Skills • Creativity and Innovation • Critical Thinking and Problem Solving • Communication • Collaboration 3. Information, Media & Technology Skills • Information Literacy • Media Literacy • ICT (Information, Communications, and Technology) Literacy 4. Life & Career Skills: • Flexibility and Adaptability • Initiative and Self-Direction • Social and Cross-Cultural Skills • Productivity and Accountability • Leadership and Responsibility	• Social and emotional skills (empathy, self-efficacy, responsibility, and collaboration) • Practical and physical skills (using new ICT devices) • Knowledge • Disciplinary • Interdisciplinary • Epistemic • Procedural • Attitudes and Values • Personal values • Social values • Societal values • Human values 3. Transformative Competencies: • Creating new value • Reconciling tensions and dilemmas • Taking responsibility 4. Anticipation- Action-Reflection Cycle (AAR) 5. Student Agency		

To determine the qualifications for higher education, QF-EHEA (2005) was adopted in May 2005 in Bergen with the participation of 45 countries that are members of the Bologna Process. The framework consists of 3 cycles. The outcomes of the first cycle include having the basic knowledge of their departments and professionally applying this knowledge to their work, being able to ask questions and solve problems related to their departments, gathering, and analyzing the related data and making judgments and reflections, being autonomous and having good communication skills. Having advanced knowledge and problem-solving skills, which can also be applied into multidisciplinary contexts, being self-directed and competent at interpreting challenging or complex situations, drawing conclusions, and making critical and ethical judgments are among the outcomes of the second cycle. Lastly, the third cycle outcomes

are mostly related to expertise in the field and the skills which are mentioned in other cycles, as well as developing research methods, competence in higher-order skills such as critical analysis, evaluation, synthesis, communication with experts and scholars in the related field and contributing to the technological, social, and cultural developments. Though the 21st-century skills are not clearly defined in the framework, it can be said that QF-EHEA supports and promotes 21st-century skills by interpreting the statements.

With the adoption of QF-EHEA, CoHE constructed the National Qualifications Framework for Higher Education in Turkey (NQF- HETR,2010). The framework consists of 4 cycles including associate's, bachelor's, master's, and doctoral degrees. The learning outcomes, skills and competences were also identified for each cycle. Within the scope of NQF-HETR (2010), some of the qualifications which are expected to be acquired at the end of the bachelor's degree can be listed as:

- Possessing advanced level theoretical and practical knowledge
- Using this knowledge to interpret and evaluate data, define, and analyze problems and develop solutions.
- Working independently and taking responsibility.
- Having critical thinking skills
- Being self-directed and having control over one's own learning.
- Having good communication skills and social competence
- Using a foreign language at least at a level of European Language Portfolio B1 General Level.
- Using ICT tools and opportunities
- Having consciousness about social, cultural, and environmental issues
- Adhering to the social, scientific, cultural, and ethical values while conducting research.

CoHE has processed a lot in terms of the implementation of the Bologna Process. However, there are still points to consider and develop. According to Higher Education Evaluation and Quality Assurance Annual Situation Report 2018-2019 (Turkish Higher Education Quality Council (THEQC), 2019), the internal and external evaluations show that student-centered learning, teaching, and assessment practices are not mature yet or not mature enough to cover all areas, except for a few institutions. Furthermore, studies to make the qualifications of fields of education compatible with QF-HETR are still in process.

Güneş (2012) states that the learning outcomes of QF-HETR and the learning outcomes of most universities in Turkey are still not compatible with each other, as the outcomes are

mainly related to knowledge rather than skills and competencies. Moreover, the practices of instructors in classes are quite important in terms of ensuring the quality of education. According to Güneş (2012), instructors mostly teach knowledge with traditional approaches and methods and implement knowledge-based assessments in actual classes. Whether the outcomes are compatible with each other or not, unless instructors implement a student-centered approach in classes, learners cannot acquire the required qualifications in the end.

2.3.1. Critical Thinking

One of the characteristics of the information age is the individuals who can learn on their own, understand, analyze, and use this knowledge as well as having problem solving skills (Çalık & Sezgin, 2005). In particular, problem-solving is mostly associated with critical thinking because to solve a problem effectively, one should think critically by interpreting the information and making judgements and decisions (Kereluik, Mishra, Fahnoe & Terry, 2013). Cambridge International Dictionary of English (1995) defines critical thinking (CT) as the act of thinking deeply about a topic or concept without being influenced by feelings or opinions. In other words, it is "thinking about thinking," in which we carefully analyze and test arguments and ideas to determine if they are reasonable or not (Moore & Parker, 2009). However, the notion of critical thinking can be easily misunderstood. For example, thinking critically and being critical are two different concepts because to make a critical judgement, one should have some level of experience or competence while critical thinking entails making informed, evaluative decisions about claims and arguments (Butterworth, Thwaites, & Thwaites, 2008). In a study by Tan (2017), confusing the notion of “critical thinking” with “negative criticism” is identified as a cultural challenge in teaching critical thinking. How teachers and learners perceive the notion of critical thinking has great importance on the effectiveness of critical thinking practices, as well as the learning environment. Tan (2017) stated that a non-threatening learning environment is perceived to be crucial to teach critical thinking skills by student teachers. Accordingly, the Cambridge Life Competencies Framework (CLCF, 2020) states that English language classrooms can provide a safe space to practice and develop CT skills because learners have opportunity to think upon various topics and discuss their ideas. Hixson et al. (2012) listed the critical thinking skills as followed:

- being able to analyze complex problems,
- investigating questions for which there are no clear-cut answers,
- evaluating different points of view or sources of information,
- and drawing appropriate conclusions based on evidence and reasoning



Figure 2. Core areas and components of critical thinking skills (CLCF,2020)

Figure 2. shows the core areas and components of critical thinking skills. Considering these competences, some of the suggested practices for adults to develop CT skills include working with various materials on a topic to recognize different perspectives, information gap activities, class debates, using visual diagrams to help learners to make more complex evaluations, and reflecting upon the activities (CLCF,2020).

Teachers' perceptions of implementing CT skills in classes are extremely important for a better understanding of the challenges they face. Choy and Cheah (2009) conducted a study to identify teachers' opinions on critical thinking and the effects of integrating CT into their teaching. According to the results of the study, teachers have positive opinions of teaching CT and its importance and benefits as well as their students' ability to think critically. On the other hand, they do not think learners can acquire CT skills on their own. Moreover, most of the teachers stated that students are not willing to participate in discussions requiring critical thinking. Another important result is that although teachers are aware of the benefits and importance of teaching CT skills in classrooms, they find it difficult to meet the requirements of integration CT in their teaching as it is more time consuming.

Another study by Zhang, Yuan, and He (2020) analyzed the perceptions and teaching practices of 336 Chinese university EFL teachers on critical thinking skills through a questionnaire that includes both Likert-type questions and open-ended questions. 12 participants were also interviewed to gather data about their opinions on how to integrate CT into teaching. The results showed a discrepancy between the teachers' perceptions of CT and CT applications in their teaching. Though teachers could see the areas that could be developed in students' behaviors to improve their critical thinking skills, they did not make students practice them. Moreover, teachers stated that they did not get any teacher training on how to

teach CT and were lack of CT skills. They also stated that there should have been more resources and support on teaching CT. The participants believed that the students need higher language proficiency in English to show CT skills. According to the study, there should be more opportunities for professional development such as workshops and observations. Besides the administrative support, peer support and collaboration between teachers are also quite important to integrate CT into teaching practices.

2.3.2. Collaboration

Studies have claimed that collaborative learning (CL) leads learners to think critically because they need to exchange ideas, be involved in discussion, take initiatives, and manage their own learning (Gokhale, 1995; Totten, 1991.) According to Hixson et al. (2012), learners who have collaboration skills can work with others effectively and respectfully to find solutions to problems and share responsibility with the purpose of completing a common task. Collaborative learning leads to autonomous learners as they take responsibility of their own actions, share responsibility, and respect each other's contributions (Chowdhury, 2021). Hei et al.(2019) draw attention to a very crucial point and explain that teacher guidance should be on the group process not the product, and on equal contribution of group members. Figure 3 shows CLCF (2020) components of collaboration skills.

COLLABORATION	Taking personal responsibility for own contribution to a group task	Actively contributing to a task
		Taking on different roles
	Encouraging effective group interaction	Listening and responding respectfully
		Establishing ways of working together
		Engaging and supporting others
	Managing the sharing of tasks in a group activity	Agreeing what needs to be done
		Managing the distribution of tasks
	Working towards task completion	Ensuring progress towards a goal
		Identifying issues and challenges
		Resolving issues

Figure 3. Core areas and components of collaboration skills (CLCF,2020)

Chen (2018) investigated what EFL college students think about collaborative learning and results showed that they feel more competent and comfortable in solving complex problems in group works. The students also favored peer help and feedback which are the basics of collaboration. Furthermore, collaborative group works helped language

teachers to see the needs of their students more clearly and take necessary actions to guide them.

2.3.3. Communication

Communication has always been considered as vital in daily, business, and academic life (Germaine, Koeller & Schubert-Irastorza, 2016). It is also seen as one of the most important skills in English language teaching context as learners must produce language. Communication is not a new skill like all the other 21st-century skills. However, it is one of the most important skills in our globalized world, which needs to be addressed. Zaitseva (2020) highlights that having good communication skills has a crucial role in today's workforce as it includes collaboration and innovation, personal interaction, blogging, and video conferencing.

Hixson et al. (2012) describe learners with good communication skills as individuals who can process their thoughts and findings by showing data and share them with various means of communication (oral and written) on different medias. Figure 4 shows the components of communication skills presented in the Cambridge Life Competencies Framework (2020).

COMMUNICATION	Using appropriate language and register for context	Using language appropriate for the situation
		Using a variety of language and communication strategies to achieve a desired effect
		Adapting language use according to different cultures and social groups
	Facilitating interactions	Using communication strategies to facilitate conversations
		Using strategies for overcoming language gaps and communication breakdowns
	Participating with appropriate confidence and clarity	Structuring spoken and written texts effectively
		Using appropriate language and presentation styles with confidence and fluency

Figure 4. Core areas and components of communication skills (CLCF, 2020)

2.3.4. Creativity

Fadel and Trilling (2009) suggest that to make learning evergreen and useful, digital natives need more experiential learning where they will practice actual working environments and solve real-world problems. To solve problems, learners need to think creatively and come-up with new ideas. To generate ideas, brainstorming, mind-mapping, doodling, and diagrams are just a few of the techniques used by creative people, who are able to test new ideas, explain, evaluate, and try to improve them (Germaine, Koeller & Schubert-Irastorza, 2016). Hixson et al. (2012) state that a creative and innovative learner can solve complex problems or tasks by

synthesizing, analyzing, and using this knowledge in original ways. Figure 5 shows creative thinking competencies and practices determined by CLCF (2020).

CREATIVE THINKING	Preparing for creativity	Participating in a range of creative activities
		Exploring issues and concepts
		Considering multiple perspectives
		Finding connections
	Generating ideas	Generating multiple ideas
		Elaborating on and combining ideas
		Imagining alternatives and possibilities
	Implementing ideas and solving problems	Experimenting with and refining ideas
		Implementing, presenting and explaining ideas and solutions

Figure 5. Core areas and components of creative thinking skills (CLCF,2020)

According to Richards (2013), learners can develop creativity effectively thanks to creative teachers in institutions where creativity is encouraged. Creative teaching allows learners to generate original ideas and use different thinking processes, which motivates the learners; hence, the teachers feel more satisfied.

Akyıldız and Çelik (2020) interviewed fifteen EFL teachers working in a secondary school to investigate their perceptions of creativity. The results showed that most of them do not use a creative approach, but they try to foster creativity through some class activities such as brainstorming and storytelling. Teachers also stated that limited time, content-heavy curriculum, and exam-oriented education are barriers to teaching creativity.

2.3.5. Self-direction

Grow (1991) defines self-directed learners as individuals who can determine their aims on their own, manage time and projects, evaluate their own performance, evaluate peers' performance, reach the necessary information, use educational resources. Self-direction can also be expressed as "learning to learn". In the 21st-century, information is easily accessible and limitless especially in online platforms. However, there are a huge source of information online, some of them are useful while some others can be deceiving. Learners have to learn the skills which will help them to sort out the necessary and valuable information from the Internet. Self-directed learners can take initiatives and use strategies to retain the useful information that will contribute their learning process. Hixson et al. (2012) defined self-directed learner as individuals who can take charge of their learning by choosing related topics to search, keep

track of their own learning, analyze their own work, and act on feedback. Figure 6 shows self-direction competencies and practices determined by CLCF (2020).

LEARNING TO LEARN	Developing skills and strategies for learning	Engaging in directed activities
		Using effective systems for finding, keeping and retrieving information
		Using effective strategies for learning and retaining information
		Using effective strategies for comprehension and production tasks
	Taking control of own learning	Setting goals and planning for learning
		Taking initiative to improve own learning
		Managing the learning environment
		Managing attitudes and emotions
	Reflecting on and evaluating own learning	Keeping track of progress
		Evaluating learning and progress
		Using feedback to improve learning

Figure 6. Core areas and components of learning to learn skills (CLCF,2020)

To encourage learners to be self-directed, teachers can include learners into the procedures of goal ABD class rules setting for lessons, developing a timetable, written criteria, an evaluation checklist for their projects (Grow, 1991). This cooperation can allow students to feel more independent and a part of learning process. Being self-directed requires working independently and taking responsibility; however, it does not mean learners will get no help from the teacher. According to the findings of a study carried out by Vu and Shah (2016), most teachers underestimate the power of guiding and instructing learners on self-directed learning whereas learners believe teacher instruction and guidance is prominent in improving their self-direction skills.

Rezaee and Mosalanejad (2015) found that problem-based methods in teaching, such as searching for learning sources and thinking critically, have great impact on developing learners' self-direction skills as well as their motivation in learning. Also, self and peer assessment develop students critical and creative thinking, allow them to work in groups collaboratively, improve their communication skills as well as their self-awareness, which are significant in developing self-direction skills (Harrison, O'Hara, & McNamara, 2015).

2.3.6. Global and Local Connections

Technology has brought the whole world together. This globalization has changed how we perceive the world and build our identities. Fadel and Trilling (2009) state that our identities

are affected by both our culture and the cultures around the world in the context of 21st-century. The young generation who was born into a digital world grow up in a global context and the need for learning global communication and making global connections increases. Hixson et al. (2012) describe the skills related to making global connections as understanding the global and geo-political issues, developing awareness of culture, literature, language, geography, and history of other countries. Similarly, learners who have skills to make local connections are expected to use their knowledge on local contexts and problems in their communities. Figure 7 shows skills related to the social responsibilities of learners in CLCF (2020).

SOCIAL RESPONSIBILITIES	Understanding personal responsibilities as part of a social group	Understanding responsibilities within a social group
		Fulfilling responsibilities within a social group
	Showing intercultural awareness	Understanding aspects of own culture
		Understanding aspects of other cultures
		Interacting with others across cultures
	Understanding global issues	Discussing a range of global issues
		Recognising personal impact on global issues

Figure 7. Core areas and components of social responsibility skills (CLCF,2020)

2.3.7. Using Technology as a Learning Tool

Hixson et al. (2012) define students who have skills to use technology for learning as individuals who can use information and communication technologies (ICT) effectively to process their learning and produce outcomes. Learning these skills are important in terms of adapting the 4.0 society. These technologies are available to make human life easier and effective. New technologies have been constantly developing every day such as artificial intelligence, virtual reality, and WEB 4.0 Thanks to these developments and digital learning tools, distant education is possible and easier nowadays. Some of the digital learning tools can be listed as interactive digital coursebooks, learning management systems (LMS), interactive touch whiteboards, video conferencing software such as Microsoft Teams, clouds, teaching and collaborating tools like Socrative, Quizizz, Padlet, Kahoot etc., and many more. Besides such smart tools, blogs, YouTube, podcasts, spreadsheets, presentation software, social media, graphic programs can also be used as a learning tool. It requires some skills to refine and choose appropriate tools or resources.

2.4. Assessing 21st-Century Skills

Saavedra and Opfer (2012) point out that it is difficult to assess the 21st-century skills as well as teaching them. Bapna, Sharma, Kaushik, and Kumar (2017) examined the various testing methods for critical thinking, creativity, empathy, and executive function, and found out a significant overlap in the design of them. In other words, the skill items in creativity can also be associated with critical thinking. In this regard, it is not easy to assess those skills separately. To overcome this challenge, the ATC21S (Assessment and Teaching of 21st-century Skills) project was developed by the university of Melbourne in 2009. The aim of the project is to accelerate learners higher order skills and find new ideas of assessing these skills (Griffin, Care & McGaw, 2012). Figure 8 shows the phases of ATC21S project.

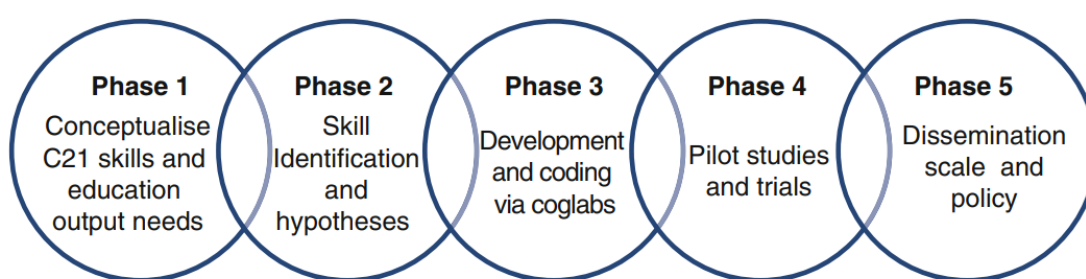


Figure 8. The phases of ATC21S project (Griffin et al., 2010)

Figure 9 shows a system of assessments where individual student data to provide direct feedback to students and faculty, as well as to notify schools and systems. The same data can be used by educators and education systems to measure the outcomes of their programs, improve their curricula, develop plans for improvement, and/or identify individual students who require extra care (Binkley et al., 2012).

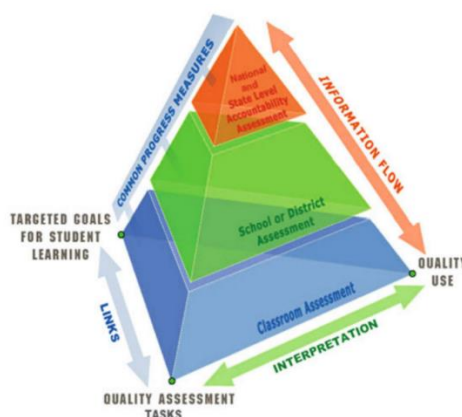


Figure 9. Integrated Assessment System (Binkley et al.,2012)

2.5. Self-Efficacy

A language is a creative and unique production of a particular community's spoken interaction. Individuals who are not from this particular community can learn their language through various methods and techniques. No matter how individuals learn a new language, they create new unique productions of this language at the end. A language is shaped by its users, so learners of a language will take some basic knowledge about the language and apply them to create new meanings. That is why being autonomous in learning a language is very crucial. According to Kumaravadivelu (2001), the process of learner autonomy begins from the top (policymakers) and continues with teacher educator because they need to raise autonomous teachers so that these autonomous teachers can raise autonomous learners.

A good teacher should be a good model for his/her students. Consequently, an autonomous teacher is valid for students to gain autonomy in their learning and language use. An autonomous teacher should investigate his or her teaching continuously, so we can say that an autonomous teacher is also a reflective teacher. Being aware of the strong and weak points of one's own teaching can help to increase the quality of the teaching. Here, it should be noted that there will be some teachers who try to develop their weak points as well as some who give up. So which factor leads to this difference? Why do some teachers feel desperate about their failure and give up while some keep trying with more effort to succeed? Bandura (1977) explained that the level of people's beliefs about their own effectiveness affect their behaviors in particular situations. Self-efficacy is defined as the belief in one's ability to successfully accomplish something. Self-efficacy theory suggests that the ones who have high self-efficacy see difficult tasks as challenges to overcome whereas people with low self-efficacy see them as threats to be avoided (Bandura, 1993). In short, autonomous teachers generally have a high level of self-efficacy.

Tschannen-Moran, Woolfolk-Hoy, and K. Hoy (1998) explained teacher efficacy as the teachers' beliefs in their abilities to successfully plan and implement the procedures of a specific teaching task. Teacher efficacy is not steady; it can change from context to context. Under different circumstances, teachers' sense of efficacy can be high or low. Varol (2018) investigated the student teachers' self-efficacy beliefs on their own teaching competency by carrying out a mixed-design study on 32 EFL student teachers in Turkey. According to the findings, student teachers indicated that they felt most competent in monitoring and assessing learners whereas they felt less competent in planning and classroom management.

Choi and Lee (2016) highlight that teachers' beliefs about their linguistic and pedagogical competencies are the most important predictors of their self-confidence as

language teachers. Stronger efficacy leads to greater effort to perform an action or longer persistence in achieving something. Conversely, people with lower efficacy tend to give up easily, they perform less effort and get poor teaching outcomes. Eventually, their self-efficacy keeps decreasing (Tschannen-Moran et al., 1998).

Another study (Eslami & Fatahi, 2008) investigated novice teachers perceived English proficiency and their perceived teaching competencies and pedagogical strategies. Quantitative data collected from 40 Iranian novice EFL teachers by means of a 12-item survey based on two different surveys. The results showed that when teachers' beliefs about their language proficiency are high, they feel more efficient in their teaching. A positive correlation between the teachers' self-efficacy beliefs and their perceived level of language proficiency was also found in Yılmaz (2011)'s study in that teachers indicated greater efficacy in applying instructional strategies than managing the class and engaging students as in the previous study.

Bandura (1977) proposed 4 main sources of personal efficacy which are mastery experiences, vicarious experience, verbal persuasion, and physiological states. Teacher self-efficacy is affected by all four sources, but the most effective source is the mastery experiences because teachers can only see their strength and weakness in the actual teaching experience (Tschannen-Moran et al., 1998). Dinçer, Göksu, Takkaç, and Yazıcı (2013) suggest that to be efficacious in teaching English, one should combine socio-affective skills, pedagogical knowledge, subject matter knowledge, and personal qualities. A balanced efficacy in all these components will lead to better teaching. Moreover, Özkara (2019) stated that the more a teacher has self-efficacy the higher personal accomplishments he/she achieves.

Topkaya (2010) examined 286 pre-service English teachers' computer self-efficacy levels and the general self-efficacy beliefs of them. The quantitative data results showed a low self-efficacy belief of pre-service teachers in using computers. Moreover, a positive correlation was detected between general self-efficacy beliefs and the computer self-efficacy perceptions of the student teachers. So, the study claims that general self-efficacy beliefs of a person affect his/her success in the enactment of a particular behavior.

Also, teachers who have strong instructional efficacy can also enable their students with mastery experiences which will lead to stronger self-efficacy in learners' behaviors. However, if they have doubts about managing that, they will probably affect learners' efficacy beliefs and cognitive development negatively (Bandura, 1993). Gavora (2010) conducted a study on 114 Slovak pre-service EFL teachers to test student teachers' self-efficacy levels with 30-item TES which was translated into Slovak. According to the results, student teachers had high personal teaching efficacy, but their general teaching efficacy showed a lower level which may mean

they are unsure about their students' ability to learn or their efficacy or may believe that his/her pupils' ability to learn is irrespective of his/her own inability to teach. They believed that they could teach efficiently and effectively, and the environmental factors do not control their teaching.

2.6. Related Studies

Hixson, Ravitz, and Whisman (2012) investigated the effects of project-based learning on the perceptions of teaching and assessing 21 century skills of 24 teachers who received and did not receive project-based learning training. For this purpose, they developed the 21st-century Teaching and Learning questionnaire, consisting of 8 different skills and a total of 72 items under 2 dimensions which are asking the frequency of using practices related to each skill and teacher's efficacy beliefs on teaching and assessing these skills. According to the results of the study, the teachers who had previously received project-based learning training stated teaching the 21st-century skills more frequently in their classrooms compared to teachers who had not received this training. According to the perceptions of the participants, among the 21st-century skills, the most often used practices are related to collaboration and critical thinking skills whereas making global and local connections skills are the least implemented. Lastly, teachers stated finding themselves successful in teaching these skills, but feeling much less effective in measuring these skills.

In a study (Charland, 2014) which is carried out by the Maine Education Research Institute investigated the methods and efficiency of teaching 21st-century skills in Maine schools by conducting an adapted version of 21st-Century Teaching and Learning Survey by Hixson, et. al.,(2012). The results have shown that communication and technology skills are the most formally requisite and assessed skills by most of the participating schools while the local connection skills are the least requisite one. Another important finding is that only 30-40% of those schools indicated assessing the 21st-century skills effectively.

In another study by Boe (2013), the integration of 21st-century skills into the lessons were investigated through surveying 682 students and 76 faculty members at a small private university in southeastern United States. According to the results, the most frequently addressed practices were related to critical thinking and self-direction whereas making global connections skill is least addressed. Collaboration, creativity, and innovation and making local connections skills are addressed to be taught more than one time a month. One of the frequently addressed

practice between collaboration skills is determined as “working in pairs or small groups to complete a task”.

Wilcox, Liu, Thall and Howley (2017) conducted the same survey (Hixson et al. 2012) on the instructors in educational technology, teacher education, and educational assessment from a university in the mid-east Atlantic region of the United States. The results showed that more than a third of the participants frequently teach 21st-century skills in their classes. In addition, a fairly significant correlation was found between the instructors’ perceptions (attempt, belief, assessment) and teaching Collaboration, Global and Local Connections skills. Using technology as a tool for learning, on the other hand, found to be less emphasized in classroom practices.

Mugot and Sumbalan (2019) investigated the 21st-century learning skills of 142 pre-service teachers (PSTs), their teaching practices and the challenges they face during their practice teaching. According to the results, collaboration and communication thinking were between the most addressed skills whereas making global and local connections skills and using technology for learning were the least addressed. Moreover, it was found that only a few PSTs applied critical thinking practices in their practicum.

Another study by Abualrob (2019) used 21st-century learning and teaching scale by Hixson et. al. (2012) to investigate 560 science teachers working at a private institution in Palestine to describe their perceptions of teaching the 21st-century skills to students. One important result of the study was that teachers with 6-10 years of experience teach the 21st-century skills more often than the other experience groups. However, no significant difference was found between all experience groups. Furthermore, although teachers had training on 21st-century skills, their levels of implementing practices related to 21st-century skills were found relatively low.

Ghamrawi, Ghamrawi and Shal (2017) administered the same survey by Hixson et al. (2012) to 667 Lebanese middle and secondary school teachers to find out that how well the Lebanese public schools meet the needs of 21st-century skills. The results showed that the schools failed to meet the needs of 21st-century skills as they scored below the average in all skills. It was also found that the practices related to communication and collaboration skills were used the most and the practices related to making local and global connections the least. Lastly, the teachers indicated that they feel competent in teaching critical thinking skills, collaboration skills, communication skills, creativity and innovation skills, and self- direction skills, but inadequate in assessing those skills.

Otlu (2020) conducted a study to find out the implementations and perceptions of language teachers on 21st-century skills by administering the 21st-century Teaching and Learning Survey by Hixson et al. (2012). The participants of the study included 106 teachers from Turkey and 77 teachers from 39 countries who teach different levels (primary to high school). The results of this study revealed that teachers implement and assess skills in UTFL the most and MLC the least. Educational background, level of education, and the country they teach at do not have a significant effect on teachers' perceptions and practices. Only the countries teachers teach in affects the level of implementing skills in UTFL. The last important finding of the study is that practices of teachers in SDS, CS, and CIS; and perceptions of them in CTS, CLS, CS, and SDS are influenced by the types of school where teachers work.



CHAPTER III

METHODOLOGY

3.1. Introduction

This chapter presents the methodology of the research. In the following sections, the research design, the participants and sampling, data collection tools, data collection procedure, data analysis, and the validity and reliability of the questionnaire are introduced.

3.2. Research Method

The current study holds a quantitative approach. The quantitative approach entails gathering data that can be measured numerically (Clark, 2017). The study used descriptive survey design to determine the classroom practices and self-efficacy beliefs of English language preparatory program (ELPP) instructors on teaching and assessing 21st-century skills. Mitchell and Jolley (1988) asserted that descriptive research could precisely define and foresee what and how individuals think, believe and act. Single and relational screening models were used which are design models in descriptive methods (Karasar, 2007). The single screening model was used to investigate the extent to which the 21st-century skills are integrated into English classes by ELPP instructors, their self-efficacy beliefs on teaching and assessing these skills, and the practices they use. Relational screening model was used to determine the differences in the level of teaching the 21st-century skills of the participants depending on their level of education, years of experience, the percentage of course hours allocated to projects, having knowledge about the 21st-century skills and teaching. In addition, relational screening model was used to find out the correlation between the participants level of teaching the 21st-century skills and self-efficacy beliefs on teaching and assessing these skills

This study aimed to describe the extent to which ELPP instructors apply classroom practices of the 21st-century skills and their self-efficacy beliefs on teaching and assessing those skills. Considering this aim, the study conducted a detailed Likert-type online survey to answer the research questions.

3.3. Participants and sampling

The data of the current study were collected from 32 universities (21 state and 11 foundation universities), from 5 different regions of Turkey. The population of the study is the English Language Preparatory Program (ELPP) instructors at state and foundation universities in Turkey. 32 universities were selected by using conventional sampling, one of the non-probability sampling methods where convenience and availability of participants are taken into account while selecting them (Creswell & Creswell, 2018). The selection of the participants was made using self-selection sampling, where individuals or organizations are invited to participate in research, and they choose to volunteer in the study on their own (Sharma, 2017). The participants of this study were 98 instructors who work in the School of Foreign Languages English Language Preparatory Program (ELPP) of total 32 state and foundation universities in Turkey.

Mitchell and Jolley (1988) state that a representative sample is quite significant for descriptive research to measure and accurately record the variables. In the light of this statement, the participants' demographic information was considered significant in terms of the heterogeneity of the sample. Table 3 shows the participants' demographic information and detailed information about the universities that participated in the study.

Table 3

The Distribution of Universities and Participants by Region, Type of Institution, Academic Degree, and the Year of Experience in the School of Foreign Languages

Demographic Information	N	%	N	%
	(University)	(University)	(Participants)	(Participants)
Region				
Marmara	6	19%	7	7,14%
Aegean	9	28%	18	18,37%
Mediterranean	5	16%	38	38,78%
Central Anatolian	10	31%	29	29,59%
Eastern Anatolian	2	6%	5	5,10%
Unknown	-	-	1	1,02%
Type of Institution				
State Universities	21	66%	47	48%
Foundation Universities	11	34%	51	52%

Demographic Information	N (University)	% (University)	N (Participants)	% (Participants)
Academic Degree				
Undergraduate	-	-	30	30,6%
Graduate	-	-	55	56,1%
Doctorate	-	-	13	13,3%
Year of Experience in the School of Foreign Languages				
1 Semester	-	-	3	3,1%
1-5 years	-	-	32	32,7%
5-8 years	-	-	17	17,3%
9-10 years or more	-	-	46	46,9%
Total	32	100%	98	100%

3.4. Data Collection Tools

Mitchell and Jolley (1988) suggest using a nonexperimental design, e.g., survey, to determine what people think, believe or how they act. Survey research examines a sample to give a numerical description of the population's ideas, attitudes, and perceptions (Creswell & Creswell, 2018). That is why, the data were collected through an online survey and demographic information form where each participant had one-time access, and after submitting the responses, they could not change or submit again. The participants were also required to sign an online consent form to take part in the study. Lastly, all the questions needed to be answered to submit the responses. In the next part, more details are given about the two data collection tools used in this study: the demographic information form and 21st-Century Teaching and Learning survey.

3.4.1 Demographic Information Form

The demographic information form, which is in Turkish/English, was used to collect data about the participants' background and their eligibility to participate in the study. The form consists of 7 questions, asking the name and type of the institution they work at, their year of experience in the School of Foreign Languages, academic degree, previous knowledge on the 21st-century skills and questions related to the course hour allocated to homework/project assignment.

3.4.2. 21st-Century Teaching and Learning Survey

The quantitative data were collected through a 72-item questionnaire named 21st-Century Teaching and Learning (standardized $\alpha > .90$, inter-item correlations $> .58$) developed by Hixson et al. (2012). The questionnaire, which is in English, investigated eight different skills of the 21st-century (CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL) under two dimensions consisting of 5-8 classroom practices related to each skill and instructors' self-efficacy beliefs on teaching and assessing those skills. Before introducing the practice and perception items, a definition related to the regarding skill was provided.

Hixson et al. (2012) used a 5-point Likert-type scale all through the questionnaire. In the first section, the participants were asked to rate the statements related to classroom practices in terms of frequency on a scale ranging from 1 to 5 (1: Almost never; 2: A few times a semester; 3: 1-3 times per month; 4: 1-3 times per week; 5: Almost daily). In the second section, the participants were asked to rate how much they taught and assessed each skill on a scale ranging from 1 to 5 (1: Not really; 2: To a minor extent; 3: To a moderate extent; 4: To a great extent; 5: To a very great extent). (See appendix 1)

The content validity of the survey was ensured by combining different but compatible frameworks (Hixson et al., 2012). The 21st-century skills framework in the survey is formed according to the International Innovative Teaching and Learning study by Shear, Novais, Means, Gallagher, and Langworthy (2010), Deeper Learning framework from The William and Flora Hewlett Foundation (2010), and Partnership for 21st-century Skills (p21.org, 2019). Hixson et al. (2012) state that providing the definitions of the skills contributed to the reliability of the measures related to each skill. The correlation between practice and perception measures was found strong for each skill (standardized $\alpha > .90$, inter-item $> .58$) as well as the correlation of all items combined ($\alpha = .986$) (Hixson et al., 2012).

3.5. Data Collection Procedure

The data collection procedure took around five months between January-May 2021. First of all, written permission from the owner(s) of the questionnaire was received via e-mail to use the survey (See Appendix-6). Surveying by visiting universities/participants was not applicable due to the COVID-19 pandemic at that time. Consequently, the questionnaire and the demographic information form was organized in an online survey format. Considering the ethical principles, the required legal permissions to conduct the research and the survey were taken from the Ethical Committee of Akdeniz University (See Appendix-4).

The survey was sent to the ELPP instructors from the selected universities via e-mail. The e-mail included an informative text about the researcher, the aim and scope of the study, as well as the survey link. 98 participants from 32 universities volunteered to take part in the study, and they signed the online consent form, which was attached to the first page of the online survey (See Appendix-5). The data obtained from the participants were recorded online.

3.6. Data Analysis

All statistical analyzes were made with IBM SPSS 25.0 program. The study first determined whether the data collection tools complied with the normal distribution hypothesis by looking at the skewness and kurtosis coefficients and preferred parametric test methods (Table 1). Secondly, the reliability of the data collection tools was evaluated, and then descriptive statistics were given. Finally, research questions evaluation was made. Three different methods were chosen while evaluating the research questions, and these methods are stated below.

1. "Independent samples t-test" was used in the determination of whether the levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL of the participants differ depending on having previous knowledge about 21st-century Education or 21st-century Skills, as it provides the assumption of normal distribution.
2. Since it provides the assumption of normal distribution, "One-way analysis of variance" was used to evaluate whether participants' levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL differ depending on the variables such as level of education, years of experience, and the percentage of course hours allocated to projects. LSD complementary analyses from one of the complementary Post Hoc analyses were used when the variances were homogeneous to determine the difference between groups.
3. Since it provides the assumption of normal distribution, "Pearson correlation analysis" was used in determining whether there is a significant relationship between the self-efficacy beliefs of instructors on teaching and assessing the 21st-century skills and the levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL.

Statistical significance was evaluated at the level of $p < .01$, $p < .05$ in all the results obtained.

CHAPTER IV

FINDINGS

4.1. Introduction

This chapter aims to present the results of the 21st-Century Teaching and Learning Scale. In the following sections, the findings are introduced in detail through tables and figures.

4.2. The Results

Analysis of the distribution of the data through statistics such as arithmetic mean, mode, median, skewness and kurtosis coefficients are stated as descriptive methods (Abbott, 2011; Kirk, 2008). In this context, the following situations are considered as evidence for the existence of a normal distribution: the fact that the arithmetic means, mode and median are equal or close, the skewness and kurtosis coefficients are close to 0 within the limits of ± 1 , and the relative coefficient of variation, which expresses the ratio of the standard deviation and the mean as a percentage, is between 20 and 25 (Howitt & Cramer, 2011; Lind et al. 2006; McKillup; Tabachnick & Fidell, 2013; Wilcox, 2012b). It is recommended to use descriptive methods and other methods and evaluate the results together in analyses of the assumption of normality (Abbott, 2011; Gnanadesikan, 1997; McKillup, 2012).

In the light of the information above, a boxplot was used to detect the erroneous data in the dataset. The Kolmogorov-Smirnov normality test was applied to find out the data distribution. The results of the normal distribution analysis shown in Table 4 demonstrate that the mean and median are close to each other, and the kurtosis and skewness are between ± 1 . In other words, the data values display a normal distribution of the variables of 21st-century skills teaching practices and teacher self-efficacy beliefs. Consequently, it was decided to apply normal distribution analyses for the study and use appropriate parametric tests (George & Mallery, 2010).

Table 4*Results of Normality Tests for the Distribution of Data*

Variables	Statistics	Df	p	Mean	Median	Min.	Max.	Skewness	Kurtosis
CTS	0,102	98	0,01	19,3469	18,5	7	30	-0,039	-0,976
CTS EFFICACY BELIFS	0,131	98	0,00	9,6429	9,5	4	15	-0,016	-0,778
CLS	0,114	98	0,00	20,4898	21,5	6	30	-0,527	-0,464
CL EFFICACY BELIFS	0,125	98	0,00	10,5408	11	3	15	-0,585	-0,305
CS	0,104	98	0,01	15,9082	16	5	25	-0,215	-0,605
CS EFFICACY BELIFS	0,166	98	0,00	11,3061	12	3	15	-0,611	0,045
CIS	0,091	98	0,04	17,3878	18	6	25	-0,267	-0,703
CIS EFFICACY BELIFS	0,113	98	0,00	9,9694	10	3	15	-0,26	-0,554
SDS	0,12	98	0,00	22,1735	24	7	35	-0,406	-0,508
SDS EFFICACY BELIFS	0,122	98	0,00	9,4184	9	3	15	-0,158	-0,454
MGC	0,085	98	0,08	19,0816	19,5	6	30	-0,102	-0,921
MGC EFFICACY BELIFS	0,121	98	0,00	9,3367	9	3	15	-0,067	-0,922
MLC	0,094	98	0,03	13,8878	14	5	25	0,231	-0,701
MLC EFFICACY BELIFS	0,129	98	0,00	8,2041	9	3	15	0,04	-0,68
UTFL	0,109	98	0,01	29,1327	29,5	11	40	-0,329	-0,823
UTFL EFFICACY BELIFS	0,166	98	0,00	11,4694	12	5	15	-0,495	-0,621

Table 5*Demographic Information of the Participants in the Research*

		n	%
The Type of Institution you work for	State	47	48,00%
	Foundation	51	52,00%
Level of Education	Undergraduate	30	30,60%
	Graduate	55	56,10%
	Doctorate	13	13,30%
How many years of experience do you have in the School of Foreign Languages Preparatory Unit?	1-5 years	35	35,70%
	6-8 years	17	17,30%
	9 years and more	46	46,90%
Do you know anything about "Education in the 21st-century " or "21st-century Skills"?	Yes	74	75,50%
	No	24	24,50%
How many assignments, projects, or research have your students completed requiring preparation that lasts one week or more in the 2020-2021 Fall Semester?	0	18	18,40%
	1	6	6,10%
	2	12	12,20%
	3	11	11,20%
	4	9	9,20%
	5	7	7,10%
	6 and more	35	35,70%
During the Fall Semester of 2020-2021, what percentage of your total course hours did you devote to assignments/projects/research that required one week or more preparation time?	%1-10	37	37,80%
	%11-20	39	39,80%
	%21-50	17	17,30%
	%51-75	5	5,10%

When the demographic distribution of the participants (Table 5) within the scope of the research is examined, 48% of the participants work in the state and 52% in a foundation university; 30.6% of them have undergraduate degrees, 56.10% graduate degree, 13.3% doctorate. 35.7% of the participants have 1-5 years, 17.3% 6-8 years, 46.9% 9 years or more work experience. It was ascertained that 75.5% of the participants had knowledge about 21st-century education and 24.5% did not. Only 5,10% of the participants allocate 51-75% of their course hours to projects that required one or more week preparation time while 39.80% allocate %11-20 of their course hours.

RQ1. To what extent do ELPP instructors teach 21st-Century Skills in their classes?

Table 6

Descriptive Statistics for the Sub-Dimensions of 21st-century Skills Teaching and Learning Scale

Sub-Dimensions	Mean	SD	N
CRITICAL THINKING	3,22	1,00	98
COLLABORATION SKILLS	3,42	1,06	98
COMMUNICATION SKILLS	3,18	0,86	98
CREATIVITY AND INNOVATION SKILLS	3,48	0,97	98
SELF-DIRECTION SKILLS	3,17	0,96	98
MAKING GLOBAL CONNECTIONS	3,18	0,97	98
MAKING LOCAL CONNECTIONS	2,78	1,02	98
USING TECHNOLOGY AS A TOOL FOR LEARNING	3,64	1,00	98
Mean=26.07			

The descriptive statistics of the 21st-century Teaching and Learning scale in Table 6 demonstrate that the 21st-century Teaching levels of the teachers were moderate ($\bar{x}=26.07$). The highest-level sub-dimension of the 21st-century Teaching and Learning scale is "using technology as a tool for learning." with an average of 3.64. CIS and CTS followed it as the second highest-level sub dimensions with an average of 3.48 and 3.42. It was determined that the sub-dimension with the lowest level was the "making local connections" dimension with an average of 2.78.

RQ2. What practices of 21st-Century Skills do ELPP instructors teach more frequently in their classes?

Table 7, which is on the next page, shows the descriptive statistics of teaching practices of each 21st-century skill, and the frequency of using these practices in classrooms is in Appendix 2.

According to the results of the CT dimension, "summarizing or creating interpretation of what learners have read or been taught" is the most implemented skill with an average of 3,64. 30 (30,60%) out of 98 participants stated that they use this practice almost daily, and 25,50% use it 1-3 times a week. The least implemented practice is "comparing information from different sources," with an average of 2.86. Only 8,20% of the participants stated using this practice almost daily, whereas 30,60% of them applied it a few times a semester and 13,30% almost never (see Appendix 2).

The results of the CL dimension showed that 53,10% of the participants implemented “pair and group work activities” almost daily and 20.40% 1-3 times a week. This practice scored the highest in the CLS dimension, with an average of 4.11. 34,70% of the participants asked their students “to present their group work in classrooms” 1-3 times a week. However, “working as a team to implement the feedback they get on their products” is the least implemented practice, with an average of 3.06. Only 11,20% of the participants stated using this practice almost daily (see Appendix 2).

Between the practices related to the CS dimension, “answering questions in front of an audience” was most frequently used, with an average of 3.67 (Table 7). Only 5,10% of the participants stated using this practice almost never. 35,70% of them asked students “to deliver oral presentations in classrooms” 1-3 times a week, whereas 25,50% a few times a semester. The least used practice is “using data in written and oral presentations,” with an average of 2.77. In other words, 19,40 % of the participants asked students to do this practice almost never, and 26,50% a few times a semester (see Appendix 2).

Table 7

Descriptive Statistics of the Teaching Practices in the Sub-dimensions of 21st-century Skills Teaching and Learning Scale

EXAMPLES OF TEACHING PRACTICES	Mean	SD	N
1. Here are some examples of practices that may help students learn CRITICAL THINKING SKILLS .			
[a. Compare information from different sources before completing a task or assignment?]	2,86	1,193	98
[b. Draw their own conclusions based on analysis of numbers, facts, or relevant information?]	3,26	1,229	98
[c. Summarize or create their own interpretation of what they have read or been taught?]	3,64	1,16	98
[d. Analyze competing arguments, perspectives, or solutions to a problem?]	3,26	1,169	98
[e. Develop a persuasive argument based on supporting evidence or reasoning?]	3,28	1,165	98
[f. Try to solve complex problems or answer questions that have no single correct solution or answer?]	3,06	1,291	98
2. Here are some examples of practices that may help students learn COLLABORATION SKILLS .			
[a. Work in pairs or small groups to complete a task together?]	4,11	1,148	98
[b. Work with other students to set goals and create a plan for their team?]	3,41	1,242	98
[c. Create joint products using contributions from each student?]	3,38	1,231	98
[d. Present their group work to the class, teacher, or others?]	3,32	1,248	98
[e. Work as a team to incorporate feedback on group tasks or products?]	3,06	1,242	98
[f. Give feedback to peers or assess other students' work]	3,21	1,294	98
3. Here are some examples of practices that may help students learn COMMUNICATION SKILLS .			
[a. Structure data for use in written products or oral presentations (e.g., creating charts, tables, or graphs)?]	2,77	1,267	98
[b. Convey their ideas using media other than a written paper (e.g., posters, video, blogs, etc.)]	3,13	0,97	98
[c. Prepare and deliver an oral presentation to the teacher or others?]	3,16	0,981	98
[d. Answer questions in front of an audience?]	3,67	1,291	98
[e. Decide how they will present their work or demonstrate their learning?]	3,17	1,149	98

EXAMPLES OF TEACHING PRACTICES	Mean	SD	N
4. Here are some examples of practices that may help students learn CREATIVITY AND INNOVATION SKILLS .			
[a. Use idea creation techniques such as brainstorming or concept mapping?]	3,76	1,036	98
[b. Generate their own ideas about how to confront a problem or question?]	3,69	1,078	98
[c. Test out different ideas and work to improve them?]	3,32	1,145	98
[d. Invent a solution to a complex, open-ended question, or problem?]	3,47	1,253	98
[e. Create an original product or performance to express their ideas?]	3,15	1,143	98
5. Here are some examples of practices that may help students learn SELF-DIRECTION SKILLS .			
[a. Take initiative when confronted with a difficult problem or question?]	3,05	1,295	98
[b. Choose their own topics of learning or questions to pursue?]	2,94	1,147	98
[c. Plan the steps they will take to accomplish a complex task?]	3,19	1,109	98
[d. Choose for themselves what examples to study or resources to use?]	3,1	1,296	98
[e. Monitor their own progress towards completion of a complex task and modify their work accordingly?]	3,21	1,229	98
[f. Use specific criteria to assess the quality of their work before it is completed?]	3,18	1,204	98
[g. Use peer, teacher, or expert feedback to revise their work?]	3,49	1,124	98
6. Here are some examples of practices that may help students learn to make GLOBAL CONNECTIONS .			
[a. Study information about other countries or cultures?]	3,44	1,122	98
[b. Use information or ideas that come from people in other countries or cultures?]	3,29	1,158	98
[c. Discuss issues related to global interdependency (for example, global environment trends, global market economy)?]	3,34	1,184	98
[d. Understand the life experiences of people in cultures besides their own?]	3,56	1,122	98
[e. Study the geography of distant countries?]	2,39	1,032	98
[f. Reflect on how their own experiences and local issues are connected to global issues?]	3,07	1,186	98
7. Here are some examples of practices that may help students learn to make LOCAL CONNECTIONS .			
[a. Investigate topics or issues that are relevant to their family or community?]	3,37	1,134	98
[b. Apply what they are learning to local situations, issues, or problems?]	3,22	1,135	98
[c. Talk to one or more members of the community about a class project or activity?]	2,46	1,245	98
[d. Analyze how different stakeholder groups or community members view an issue?]	2,35	1,167	98
[e. Respond to a question or task in a way that weighs the concerns of different community members or groups?]	2,49	1,203	98
8. Here are some examples of practices that may help students learn to USE TECHNOLOGY AS A TOOL FOR LEARNING .			
[a. Use technology or the Internet for self-instruction (e.g., Kahn Academy or other videos, tutorials, self-instructional websites, etc.)?]	3,95	1,134	98
[b. Select appropriate technology tools or resources for completing a task?]	4,14	1,015	98
[c. Evaluate the credibility and relevance of online resources?]	3,3	1,437	98
[d. Use technology to analyze information (e.g., databases, spreadsheets, graphic programs, etc.)?]	3,21	1,445	98
[e. Use technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.)?]	4,05	1,039	98
[f. Use technology to support teamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.)?]	3,93	1,212	98
[g. Use technology to interact directly with experts or members of local/global communities?]	2,73	1,57	98
[h. Use technology to keep track of their work on extended tasks or assignments?]	3,82	1,263	98

All the practices in the CIS dimension were stated to be implemented above the average by the participants. “Using idea creation techniques” is the most frequently applied practice, with an average of 3,76. “Creating ideas to solve a problem” comes second with an average of

3.69, and “creating an original product or performance” comes last with an average of 3.15 (Table 7).

The results of the SDS dimension showed that participants asked learners “to use peer, teacher or expert feedback” the most, with an average of 3.49. 44.90% of them stated using this practice 1-3 times a week, and 16.30% of them almost daily. “Monitoring their own progress” comes second, with an average of 3.21. 35.70% of the participants asked learners to do that 1-3 times a week. However, they asked learners “to choose their own topics of learning” the least, with an average of 2.94. Only 8.20% of the participants used this practice almost daily (see Appendix 2).

All the practices in the MGC dimension were implemented above the average except “studying the geography of distant countries”, with an average of 2.39. Only 4.10% of the participants asked learners to do that almost daily. 24.50% of the participants asked learners “to understand the life experiences of people in different cultures” almost daily and “discuss global issues” 1-3 times per week (see Appendix 2).

Participants scored mainly below the average in implementing the practices in the MLC dimension. The least frequently applied practice was determined as “analyzing how different groups in a community understand an issue,” with an average of 2.35. Only 4.10% of the participants used this practice almost daily, and 14.30% 1-3 times per week. “Talking to the local people about a class project” was the second least implemented practice, with an average of 2.46. The most frequently applied practice was determined as “searching topics or issues related to their family or community,” with an average of 3.37. 31.60% of the participants asked learners to do it 1-3 times per week (see Appendix 2).

The results of the UTFL dimension (Table 7) demonstrated that teachers asked learners “to choose appropriate technology tools to complete a task” the most frequently, with an average of 4.14. “Using technology to share information” and “using the Internet for self-instruction” were the following most implemented practices. 42.90% of the participants stated using these two practices almost daily. 44.90% also said implementing “to use technology to support collaboration” almost daily. “Using technology to interact experts or members of local/global communities” was asked the least frequently in classrooms, with an average of 2.73. 34.70% of the participants almost never asked learners to do this practice (see Appendix 2).

RQ3. Is there a statistically significant difference in ELPP instructors' teaching 21st-century skills based on their socio-demographic characteristics (previous knowledge about 21st-century skills, level of education, years of experience, the percentage of course hours allocated to assignments/projects/research that required one week or more preparation time)?

Table 8

Findings on the Differences in the participant's Levels of Teaching 21st-century Skills depending on their previous knowledge about 21st-century teaching/skills

Skills	Do you know anything about 21st-century teaching/skills?	N	Mean	SD	t	df	p
CTS	Yes	74	3,27	1,00	0,794	96	0,429
	No	24	3,08	1,02			
CLS	Yes	74	3,50	1,05	1,323	96	0,189
	No	24	3,17	1,09			
CS	Yes	74	3,25	0,89	1,353	96	0,179
	No	24	2,98	0,77			
CIS	Yes	74	3,54	0,96	1,032	96	0,305
	No	24	3,30	1,00			
SDS	Yes	74	3,23	0,99	1,052	96	0,295
	No	24	2,99	0,86			
MGC	Yes	74	3,33	0,93	2,8	96	*0,006
MLC	Yes	74	2,83	1,01			
	No	24	2,63	1,06	0,843	96	0,401
UTFL	Yes	74	3,73	1,01			
	No	24	3,38	0,95			

* $p < .05$

Table 8 shows the results of independent samples t-test which was applied to determine whether the participant's level of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL differ depending on having previous knowledge of 21st-Century Education or the 21st-Century Skills. According to the results in Table 8, the difference is not statistically significant at the 95% confidence level in CTS, UTFL, CLS, CS, CIS, SDS, and MLC ($p > .05$).

The difference, which depends on having previous knowledge of the 21st-Century Education or Skills, in the participants' levels of teaching MGL skills, was found to be statistically significant at the 95% confidence level ($t = 2.8$, $p = .01$, $p < .05$). The level of teaching MGC of the participants who had prior knowledge of the 21st-Century Education or Skills equals an average of 3,33. In addition, the level of teaching MGC of the participants who had no prior knowledge equals an average of 2,72.

Table 9

Findings on of the Differences in the Levels of Teaching 21st-century Skills of the Participants by Education Levels

SKILLS	Education	N	Mean	SD	F	p	LSD
CTS	Undergraduate	30	3,05	0,91	0,973	0,382	
	Graduate	55	3,25	1,08			
	Doctorate	13	3,50	0,86			
CLS	Undergraduate	30	3,22	1,19	1,78	0,174	
	Graduate	55	3,59	1,01			
	Doctorate	13	3,13	0,89			
CMS	Undergraduate	30	3,14	0,86	0,353	0,703	
	Graduate	55	3,24	0,91			
	Doctorate	13	3,03	0,71			
CIS	Undergraduate	30	3,29	1,13	0,781	0,461	
	Graduate	55	3,55	0,94			
	Doctorate	13	3,58	0,62			
SDS	Undergraduate	30	2,88	1,03	2,395	0,097	
	Graduate	55	3,35	0,94			
	Doctorate	13	3,08	0,73			
MGC	Undergraduate	30	2,86	1,00	2,566	0,082	
	Graduate	55	3,29	0,93			
	Doctorate	13	3,45	0,96			
MLC	Undergraduate	30	2,31	0,96	6,042	*0,003	3>1
	Graduate	55	2,90	1,00			3>2
	Doctorate	13	3,34	0,86			
UTFL	Undergraduate	30	3,41	0,99	1,313	0,274	
	Graduate	55	3,71	1,03			
	Doctorate	13	3,88	0,91			

* $p < .05$

One-way ANOVA test was used to determine whether the participant's levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL differ depending on their level of education. Looking at Table 9 on the previous page, it was determined that the differences in the levels of teaching CTS, CLS, CS, CIS, SDS, MGC, and UTFL depending on the level of education of the participants were not statistically significant at the 95% confidence level ($p > .05$).

The difference in the participants' level of teaching MLC practices based on their level of education was found to be statistically significant at the 95% confidence level ($F=6.04$, $p=.01$, $p<.05$). The highest level of teaching MLC practices belongs to the participants with a doctorate education with an average of 3.34. The lowest level of teaching Local connections belongs to the undergraduate participants with an average of 2.31 (Table 9).

Table 10

Findings on The Differences in the Levels of Teaching 21st-century Skills of the Participants Depending on the Percentage of Course Hours Allocated to Projects/Assignments which Require One Week or More Preparation Time

Skills	Percentage	N	Mean	SD	F	p	LSD
CTS	%1-10	37	2,98	0,97	1,271	0,289	
	%11-20	39	3,36	1,03			
	%21-50	17	3,33	0,93			
	%51-75	5	3,60	1,19			
CLS	%1-10	37	3,09	1,04	2,591	0,057	
	%11-20	39	3,48	1,11			
	%21-50	17	3,90	0,88			
	%51-75	5	3,63	0,79			
CS	%1-10	37	2,98	0,85	1,138	0,338	
	%11-20	39	3,32	0,86			
	%21-50	17	3,25	0,85			
	%51-75	5	3,36	1,04			
CIS	%1-10	37	3,18	1,03	2,207	0,092	
	%11-20	39	3,61	0,91			
	%21-50	17	3,84	0,74			
	%51-75	5	3,44	1,31			
SDS	%1-10	37	2,86	0,93	2,425	0,071	
	%11-20	39	3,28	0,98			
	%21-50	17	3,55	0,72			
	%51-75	5	3,20	1,33			
MGC	%1-10	37	2,72	0,94	5,024	*0,003	3>1
	%11-20	39	3,46	0,95			3>2
	%21-50	17	3,48	0,84			
	%51-75	5	3,40	0,55			
MLC	%1-10	37	2,38	0,97	3,59	*0,017	2>1
	%11-20	39	3,10	1,04			
	%21-50	17	2,93	0,80			
	%51-75	5	2,64	1,16			
UTFL	%1-10	37	3,20	0,95	5,187	*0,002	3>1
	%11-20	39	3,86	0,98			3>2
	%21-50	17	4,16	0,80			
	%51-75	5	3,45	1,07			

***p<.05**

One-way ANOVA test was conducted to determine whether the participants' levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL differ depending on the percentage of course hours allocated to projects and assignments which required more than one week preparation time. According to the results shown in Table 10, it was seen that the difference in the levels of teaching “CTS, CLS, CS, CIS, and SDS depending on the percentage of the course

hours allocated to long term projects and assignments was not statistically significant at the 95% confidence level ($p>.05$).

Conversely, table 10 showed that the difference in the participants' level of teaching MGC and the percentage of class hours allocated to long term projects and assignments was found to be statistically significant at the 95% confidence level ($F=5.02$, $p=.01$, $p<.05$). The levels of teaching MGC of the participants who spend 21-50% of their course hours on projects and assignments are higher than the levels of teaching MGC of the participants who spend 11-20% and 1-10% of their course hours.

Similarly, it was seen that the difference in the participants' levels of teaching MLC and the percentage of class hours allocated to long term projects and assignments was statistically significant at the 95% confidence level ($F=3.59$, $p=.02$, $p<.05$). The levels of teaching MLC of the participants who spend 1-10% of their course hours on long-term projects and assignments are lower than those of the participants who spend 11-20% of their course hours.

Table 10 also displays that the difference in the levels of teaching UTFL skills of the participants depending on the percentage of the course hours allocated to long term projects and assignments was statistically significant at the 95% confidence level ($F=5.19$, $p=.002$, $p<.05$). The levels of teaching UTFL of the participants who spend 21-50% of their course hours on long term projects and assignments are higher than the levels of teaching UTFL of the participants who spend 11-20% and 1-10% of their course hours.

Table 11

Findings on the Differences in the Levels of Teaching 21st-century Skills of the Participants by the Years of Experience.

Skills	Experience	N	Mean	SD	F	p	LSD
CTS	1-5 years	35	3,29	0,83	0,209	0,812	
	6-8 years	17	3,10	1,13			
	9 years and more	46	3,22	1,09			
CLS	1-5 years	35	3,80	0,92	4,72	*0,011	1>3
	6-8 years	17	3,48	0,99			
	9 years and more	46	3,10	1,11			
CS	1-5 years	35	3,38	0,79	2,595	0,08	
	6-8 years	17	3,34	0,87			
	9 years and more	46	2,97	0,89			
CIS	1-5 years	35	3,77	0,83	2,961	0,057	
	6-8 years	17	3,48	1,05			
	9 years and more	46	3,25	1,00			
SDS	1-5 years	35	3,38	0,75	1,501	0,228	
	6-8 years	17	3,14	0,88			
	9 years and more	46	3,01	1,11			
MGC	1-5 years	35	3,31	0,83	0,829	0,44	
	6-8 years	17	2,94	0,88			
	9 years and more	46	3,17	1,09			
MLC	1-5 years	35	2,92	0,99	0,672	0,513	
	6-8 years	17	2,81	1,05			
	9 years and more	46	2,66	1,04			
UTFL	1-5 years	35	3,70	1,04	0,571	0,567	
	6-8 years	17	3,40	1,17			
	9 years and more	46	3,69	0,91			

***p<.05**

A one-way ANOVA test was used to determine whether the participants' levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL differ depending on the years of experience. According to the results of the one-way ANOVA test shown in Table 11, it was found that the difference in the participant's levels of teaching CTS, CLS, CS, CIS, and SDS, depending on their years of experience was not statistically significant at the 95% confidence level (**p>.05**).

The difference in the participants' teaching CLS levels depending on their years of experience was statistically significant at the 95% confidence level (**F=4.72, p=.01, p<.05**). The

levels of teaching CLS of participants with 1-5 years of experience are higher than those with 9 years or more of experience (Table 11).

RQ4. To what extent do ELPP instructors feel competent in teaching and assessing the 21st-Century Skills?

Table 12

Descriptive Statistics of the Self-Efficacy Beliefs Sub-Dimension of 21st-century Skills Teaching and Learning Scale

	Mean	SD	N
SELF-EFFICACY BELIEFS ON CTS	3,21	0,96	98
SELF-EFFICACY BELIEFS ON CLS	3,51	1,07	98
SELF-EFFICACY BELIEFS ON CS	3,77	0,87	98
SELF-EFFICACY BELIEFS ON CIS	3,32	1,02	98
SELF-EFFICACY BELIEFS ON SDS	3,14	0,95	98
SELF-EFFICACY BELIEFS ON MGC	3,11	1,14	98
SELF-EFFICACY BELIEFS ON MLC	2,73	1,06	98
SELF-EFFICACY BELIEFS ON UTFL	3,82	0,95	98

Mean=26.63

The descriptive statistics for the Self-Efficacy Belief Sub-Dimensions of 21st-century Teaching and Learning scale in Table 12 shows that self-efficacy beliefs of instructors on teaching and assessing the 21st-century skills are at a medium level ($\bar{x}=26.63$). The highest-level sub-dimension of the self-efficacy scale is "using technology as a tool for learning." with an average of 3.82. dimension, and the lowest level sub-dimension was the "local connections" dimension with an average of 2.73 (Table 12).

38,80% of the participants believed that they tried to develop learners' UTFL skills to a very great extent; however only 27,60% of them stated to feel effective in assessing those skills (see Appendix 3). According to Table 13 on the next page, teachers scored lower in their beliefs on assessing 21st-century skills than their beliefs on teaching those skills. They felt most competent in developing students' CS, with an average of 4.07, developing students' UTFL skills follows it with an average of 4.04. On the other hand, they felt least competent in developing students' skills in MLC, with an average of 2.94.

Participants believed that the levels of students' acquiring these skills are moderate. 36.70% of the participants believed that their students learned CLS. 48% of them believe that most students have learned CS to a great extent in their classes (see Appendix 3). They stated to feel least competent in assessing skills in MLC, with an average of 2.62, followed by SDS, with an average of 2.95. Only 6.10% of the participants believed to assess SDS to a very great

extent, and 5,10% to assess MLC skills. They feel the most competent in assessing communication skills, with an average of 3.66. Moreover, 23.50% of the participants believed to be effective in assessing this skill to a very great extent, and 36,70% to a great extent (see Appendix 3).

Table 13

Descriptive Statistics of the Items in Self-Efficacy Beliefs Sub-Dimension in 21st-century Skills Teaching and Learning Scale

	Mean	SD	N
1. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' critical thinking skills.	3,63	0,978	98
b. Most students have learned critical thinking skills while in my class.	3,04	1,045	98
c. I have been able to effectively assess students' critical thinking skills.	2,97	1,079	98
2. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' collaboration skills.	3,83	1,065	98
b. Most students have learned collaboration skills while in my class.	3,47	1,114	98
c. I have been able to effectively assess students' collaboration skills.	3,24	1,185	98
3. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' communication skills.	4,07	0,876	98
b. Most students have learned communication skills while in my class.	3,57	0,931	98
c. I have been able to effectively assess students' communication skills.	3,66	1,045	98
4. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' creativity and innovation skills.	3,61	1,042	98
b. Most students have learned creativity and innovation skills while in my class.	3,19	1,118	98
c. I have been able to effectively assess students' creativity and innovation skills.	3,16	1,137	98
5. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' self-direction skills.	3,45	0,986	98
b. Most students have learned self-direction skills while in my class.	3,02	1,025	98
c. I have been able to effectively assess students' self-direction skills.	2,95	1,125	98
6. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' skills in making global connections.	3,32	1,189	98
b. Most students have learned to make global connections while in my class.	3,06	1,165	98
c. I have been able to effectively assess students' skills in making global connections.	2,96	1,235	98
7. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' skills in making local connections.	2,94	1,111	98
b. Most students have learned to make local connections while in my class.	2,64	1,077	98
c. I have been able to effectively assess students' skills in making local connections.	2,62	1,171	98
8. To what extent do you agree with these statements about your TARGET CLASS?			
a. I have tried to develop students' skills in using technology as a tool for learning.	4,04	0,93	98
b. Most students have learned to use technology as a tool for learning while in my class.	3,85	0,988	98
c. I have been able to effectively assess students' skills in using technology for learning.	3,58	1,183	98

RQ5. Is there a statistically significant relationship between the extent to which participants teach 21st-Century Skills in their classes and their self-efficacy levels of teaching and assessing those skills?

Table 14

Results of Correlational Analysis of the participants' levels of teaching 21st-Century Skills and Self-efficacy Beliefs on Teaching and Assessing these Skills

CRITICAL THINKING	r	CRITICAL THINKING SELF-EFFICACY BELIFS ,708**	COMMUNICATION SKILLS	r	COMMUNICATION SELF-EFFICACY BELIFS ,689**
	p	*0,00		p	*0,00
COLLABORATION SKILLS	r	COLLABORATION SELF-EFFICACY BELIFS ,780**	CREATIVITY AND INNOVATION	r	CREATIVITY SELF-EFFICACY BELIFS ,765**
	p	*0,00		p	*0,00
SELF DIRECTION	r	SELF-DIRECTION SELF-EFFICACY BELIFS ,824**	GLOBAL CONNECTIONS	r	GLOBAL CONNECTION SELF-EFFICACY BELIFS ,784**
	p	*0,00		p	*0,00
LOCAL CONNECTIONS	r	LOCAL CONNECTION SELF-EFFICACY BELIFS ,774**	USING TECHNOLOGY AS A TOOL FOR LEARNING	r	TECHNOLOGY SELF-EFFICACY BELIFS ,747**
	p	*0,00		p	*0,00
	N	98		N	98

****p<.01**

Pearson correlation analysis was conducted to determine whether there is a relationship between the participants' levels of teaching CTS, CLS, CS, CIS, SDS, MGC, MLC, and UTFL and their self-efficacy beliefs on teaching and assessing those skills. The results of the correlation analysis in Table 14 showed that there was a positive and moderately significant relationship between the participants' level of teaching CTS and their self-efficacy beliefs on teaching and assessing this skill at 99% confidence level (**r=.708, p=.00, p<.01**).

It was also seen that there was a positive and moderately strong relationship between the participants' level of teaching CLS and their self-efficacy beliefs on teaching and assessing this skill at a 99% confidence level (**r=.78, p=.00, p<.01**).

Table 14 showed a positive correlation and moderately strong relationship between the participants' level of teaching CS skills and their self-efficacy beliefs on teaching and assessing this skill at the 99% confidence level (**r=.69, p=.00, p<.01**).

The correlation analysis results (Table 14) displayed a positive and moderately strong relationship between the participants' levels of teaching CIS and their self-efficacy beliefs on teaching and assessing this skill at the 99% confidence level (**$r=.76$, $p=.00$, $p<.01$**).

The correlation analysis also demonstrated a positive and high-strength significant relationship between the participants' levels of teaching SDS and their self-efficacy beliefs of teaching and assessing this skill at 99% confidence level (**$r=.82$, $p=.00$, $p<.01$**).

Another positive and moderately strong relationship was found between the participants' levels of teaching MGC skills and their self-efficacy beliefs of teaching and assessing this skill at 99% confidence level (**$r=.78$, $p=.00$, $p<.01$**).

Similarly, there was a positive and moderately strong relationship between the participants' levels of teaching MLC skills and their self-efficacy beliefs of teaching these skills at 99% confidence level (**$r=.77$, $p=.00$, $p<.01$**).

According to the results of the correlation analysis, it was seen that there was a positive and moderately strong relationship between the participants' levels of teaching UTFL skills and their self-efficacy beliefs of teaching and assessing these skills at 99% confidence level (**$r=.75$, $p=.00$, $p<.01$**).

CHAPTER V

DISCUSSION, CONCLUSION, SUGGESTIONS

5.1. Introduction

This chapter presents discussion, conclusion, pedagogical implications of the study and suggestions for further research.

5.2. Discussion

The first research question of this study was about to what extent ELPP instructors teach 21st-century skills in their classes. The analysis of the quantitative data clearly shows that the majority of the English Language Preparatory Program instructors (75.5%) know about the 21st-century education and skills; however, they teach those skills to a moderate extent. In other words, they use the practices related to the skills 1-3 times per month on average. These results are similar to those reported by Otlu (2020) and Abualrob (2019). On the other hand, a study conducted in United States by Wilcox et al. (2017) stated that their participants teach the 21st-century skills frequently in their classes whereas Lebanese participants in the study by Ghamrawi et al. (2017) scored below the average. These differences may have resulted from the mismatch between curriculums applied in different countries.

While UTFL practices were determined to be the most applied skill by the participants of the study, the least applied skill was determined as MLC. Although the reasons related to using these skills in English classes were not scrutinized in this study, it should be noted that the high scores in practices related to using technology for learning might have been affected by the pandemic conditions since distance/online education was conducted in Turkey. In addition, the low scores in making local connection practices might have been resulted from the nature of English classes as global culture and problems is taking into consideration more often. The results tie well with the study by Charland (2014) which is carried out by the Maine Education Research Institute investigated the methods and efficiency of teaching the 21st-century skills in Maine schools and the results have similarly shown that communication and technology skills are the most formally requisite and assessed skills by most of the participating schools while the local connection skills are the least requisite one. Another study which shows

similar results have been conducted by Boe (2013) at a small university in the United States with the participation of both instructors and students, and results showed that UTFL is the most implemented skill, whereas global and local connections are the least (Boe, 2013). The findings are also directly in line with the study by Otlu (2020). Contrary to the results discussed above, teaching practices related to UTFL was implemented less by the participants in some other studies. (Ghamrawi et al., 2017; Mugot & Sumbalan, 2019; Wilcox et al., 2017). Finally, although the participants levels of implementing the CTS, CS, SDS, MGC into classrooms is at average, it is clear that those skills are not fostered as much as UTFL, CIS and CLS.

The second research question aimed to find out the most frequently used practices of the 21st-century skills by the instructors in their English classes. In terms of teaching Critical Thinking Skills, the instructors tend to assign activities regarding “summarizing or interpreting a reading” text more often in their English classes. Similar results were found in the study by Wilcox et al (2017). On the contrary, “asking students to compare information from different sources” was determined as the least used practice by the participants. These results are also consistent with the findings of Otlu(2020). Similarly, Ghamrawi et al. (2017) found that teachers addressed the practice “compare information from different sources” the least; however, the practice “draw their own conclusions based on analysis of numbers, facts, or relevant information” was addressed the most. This difference may have been resulted from the field of expertise of the participants in different studies such as science or math. As some practices might not be applicable to all kinds of activities in English classes such as structuring data to use charts, tables and graphs in the presentations or analyzing numbers etc.

In terms of Collaboration skills, the participants asked their students to “work in pairs and small groups” the most frequently to complete a task. However, they used these groups tasks least frequently to incorporate feedback on group tasks. They tended to foster individual peer feedback. These results tie well with the findings of Otlu (2020). Moreover, Boe (2013), Ghamrawi et al. (2017), and Wilcox et al. (2017) have found similar results where “working in pairs or small groups to complete a task” was also determined as the mostly used practice.

Regarding Communication skills, the participants asked students to answer question in front of an audience more often than delivering oral presentations. In addition, the participants did not expect their students to structure data for use charts, tables, or graphs in their presentations much. This result ties well with previous studies wherein Ghamrawi et al. (2017), Otlu (2020), and Wilcox et al. (2017).

With reference to Creativity and Innovation skills, the instructors assigned students activities where they could use idea creation techniques like brainstorming or concept mapping more often than asking them to create an original product. These results are similar to those reported by Ghamrawi et al. (2017) and Otlu (2020). These similarities shows that teachers tend to choose fewer complex practices while teaching creativity skills. This might be resulted from the lack of the time they can allocate to such activities and/or the convenience of using idea creation techniques.

In terms of Self-Direction skills, the instructors focused on different types of feedback such as peer, teacher, or expert. They preferred activities where students take initiative, such as choosing their own topics of learning etc., less often. Similar results were also found in Ghamrawi et al. (2017) and Otlu (2020). These similarities shows that teachers give importance to feedback; however, they are not yet ready to include the learners into teaching process more often. Maybe it is uncomfortable for some instructors to let learners to choose their own learning topics. One solution might be giving them a suggested list of topics prepared by the instructor and ask them to choose from the list. In this way, teachers won't feel uncomfortable as they provide the topics and learners will feel more autonomous as they choose their topics to study on their own.

As to making Global Connections skills, the instructors used activities where students studied information about different cultures and understood lives of people in different countries more, but they expected students to study the geography of those places the least. In terms of Local Connections, the most frequently used practice is related to researching topics and issues about their family or community while the least is analyzing other people's opinions about those issues. These results tie well with the findings of Otlu (2020).

In terms of Using Technology as a Tool for Learning, the instructors asked students to select appropriate technology tools or resources while doing a task and sharing information. However, they did not encourage students to interact with experts or members of local/global communities enough. Correspondingly, Wilcox et al. (2017) found that one of the most implemented practices in terms of teaching using technology for learning was "select appropriate technology tools". Conversely, Otlu (2020) found that "use technology or Internet for self-instruction" as the most implemented skill whereas the least implemented skill ties well with the results of the current study. Although the participant in Ghamrawi et al. (2017)'s study scored lower overall in teaching practices related to using technology, "analyze information using technology" was determined as the most implemented practice.

The third research question investigated the differences in the participant's levels of teaching the 21st-century skills based on their socio-demographic characteristics (previous knowledge about the 21st-century skills, level of education, years of experience, the percentage of course hours allocated to assignments/projects/research that required one week or more preparation time).

Firstly, having prior knowledge about the 21st-century skills has only a positive effect in teaching practices related to Global Connections. This shows that getting knowledge about 21st-century education helps teachers to be aware of the importance of making global connections. Correspondingly, Abualrob (2019) stated that although the participants of the study had training on the 21st-century skills, their implementations of the practices related to those skills remained at a moderate level. This shows that teachers of our time are not yet ready to integrate the 21st-century skills fully into classes.

Secondly, unlike the results of Hixson et al. (2012), the results of this study showed a significant difference only in making local connection skills based on the levels of education. To explain, the instructors with a doctorate degree teach MLC skills more frequently than those with a graduate or undergraduate degree. Otlu (2020) found a similar difference in teaching practices related to global connections. One reason for that might be the fact that lecturers with doctorate degree follow the current studies and conduct research on the current issues more than the lecturers with other degrees.

Thirdly, the only significant difference was that the instructors with 1-5 years of experience teach collaboration skills more frequently than those with 9 years or more. In line with previous studies (Abualrob, 2019; Otlu, 2020), no significant difference was found in other skills. This result shows that novice teachers are more precise in using collaborative activities in their English classes. In addition, it shows that more experienced teachers haven't adapted themselves to the changes in 21st-century education enough to develop learner's collaboration skills properly yet. One reason why younger generation shows more attempt to use those skills in their lessons might be the fact that they learn new and modern teaching methodologies in the bachelor's degree, and they are encouraged to use collaborative and communicative methods more.

Lastly, according to the results, the more instructors spend their course hours on projects, the more they teach skills related to MCL, MLC, and UTFI. It can be concluded that projects/assignments which require one week or more preparation time encourages learners to use technology and discuss the global and local issues more.

The fourth research question of the study was related to what extent the ELPP instructors believe that they teach and assess the 21st-century skills. The findings revealed that the instructors feel moderately competent in teaching and assessing the 21st-century skills. While the instructors' feel the most competent in teaching UTFL skills, they feel the least competent in teaching and assessing Local Connections skills. This might be resulted from the circumstances during the Covid-19 pandemic since all teachers had to use distant and online education resources. That situation led them to integrate technology more often into classes and the more they teach with technological resources, the more they get experienced and feel competent.

Another important finding of the study is that teachers' beliefs upon their efforts in developing students' the 21st- century skills are higher than the beliefs upon to what extent their students have learned those skills. This finding is similar to those of Gavora (2010) wherein student teachers had high personal teaching efficacy, but their general teaching efficacy showed a lower level which may mean they are unsure about their students' ability to learn or their efficacy or may believe that his/her pupils' ability to learn is irrespective of his/her own inability to teach. Moreover, in line with previous studies (Ghamrawi et al., 2017; Hixson et al.,2012), instructors believe they are more competent in teaching the 21st-Century skills than assessing. This might be resulted from the lack of standardized assessment tools for 21st-century skills. Also, Bapna et al. examined the various testing methods for critical thinking, creativity, empathy, and executive function, and found out a significant overlap in the design of them, so it is difficult to assess each skill separately as most of them are connected to each other.

Finally, although the participants feel the most competent in teaching skills in UTFL and believe that their students learned these skills better than the other skills, they feel most competent in assessing students' communication skills. This result might be affected by the nature of English Language teaching as speaking is one of the core skills taught and assessed in English language classes, so it is normal for teacher to feel more competent in assessing this skill. Furthermore, there are more resources available for assessing communication/speaking than using technology for learning skills and other 21st-century skills.

The fifth research question of the study explores the relationship between the instructors' levels of teaching the 21st-century skills and their self-efficacy beliefs on teaching and assessing these skills. Bandura (1977) explained that the level of people's beliefs about their own effectiveness affect their behaviors in particular situations. Concordantly, it has been concluded that there is a positive and mostly moderately strong relationship between the levels of teaching the 21st-century skills and self-efficacy beliefs of the instructors on teaching and

assessing these skills. A similar finding was found by Wilcox et al. (2017). This means the instructors who tend to use the practices related to the 21st-century skills more frequently in their English classes, feel more competent in teaching and assessing those skills. Similarly, when they feel more competent in teaching and assessing the 21st-century skills, they use the practices more frequently.

5.3. Conclusion

In conclusion, although the ELPP instructors do their best to integrate the 21st-century skills into their academic programs, there is still a need for improvement. The 21st-century skills should be integrated more into English preparatory classes as it will provide learners to succeed better in their departments and find better jobs in the future. Moreover, English lessons will be more fun, challenging and intriguing.

The results of the current study also show the importance of determination and grit in teaching. Duckworth (2007) defines grit as perseverance and passion for long-term goals. Gritty teachers keep their motivation high, don't quit easily because they are resilient against difficulties. Achieving 21st-century skills won't happen a day, and it takes time for both learners and teachers. Since preparatory class instructors have limited time with their learners, it is even harder for them to see the results of their efforts. That is why demotivated teachers might quit teaching these skills in their English lessons. However, the more they teach, the more they get competent. For these reasons, the grit of instructors in teaching 21st-century skills is the key to the success of learners in achieving them.

The third point is that the Modern English language teaching methods and techniques affect the teachers' implementation of practices related to the 21st-century skills. For example, communicative methods draw attention to the importance of communication and collaboration along with creativity; task-based learning draws attention to problem-solving skills and creativity. Project-based learning encourages teachers to use more self-direction, communication, collaboration, creativity, and UTFL. For all these reasons, teachers who follow the changes in their expertise and try to shape their teaching with various methods and techniques will automatically apply most of the practices mentioned in the current study.

The last and one of the most critical points is the lack of standardized assessment instruments for 21st-century skills. Assessment is as important as teaching the 21st-century skills because it is an excellent way of getting feedback for learners and instructors. However, there are not enough standardized assessment tools for 21st-century skills.

5.4. Pedagogical Implications and Suggestions for Further Research

The current study has revealed that although the majority of the ELPP instructors have knowledge about 21st-century skills, their levels of teaching practices related to the 21st-century skills and their self-efficacy beliefs on teaching and assessing those skills are moderate. Accordingly, there is still need for integrating those skills more into higher education. One of the most important findings of the study shows that instructors do not believe that they assess those skills effectively. The lack of emphasis of teaching and assessing the 21st-century skills on the curriculum, standardized assessment tools for the 21st-century skills, teacher self-efficacy, awareness about the importance of those skills among instructors, encouragement from the principals and institutions can be listed as some of the reasons why instructors do not integrate those skills more often into their English classes. However, these reasons were not investigated in the study, so there is a need for future studies which can be conducted through mixed-methods, case studies, and various designs.

Findings of this study indicate that instructors do their best to integrate the 21st-century skills into their academic programs, but there is still need for development. To help instructors to integrate these skills more into curriculum, enough resources and support should be provided by the curriculum developers and administrations of the institutions. Also, some instructors may still need guidance in how to implement these skills into their classes meaningfully and effectively, so seminars on 21st-century skills and how to implement them in classes should be organized more often. More importantly, the coursebooks should be selected from those who successfully integrate and explicitly show the 21st-century skills in the activities. In terms of evaluation of the acquired skills, teachers should be encouraged to use standardized assessment tools. However, such tools should be developed in the first place by assessment committees. In terms of quality assurance and professional development peer and expert observations should be held regularly.

Further studies can investigate the reasons behind instructors' preferences for practices and frequency of teaching and assessing those skills using qualitative and quantitative methods. Also new studies can be conducted with a larger sample. Moreover, it is suggested that a similar study where instructors' perceptions are supported and/or compared with their learners' perceptions can be conducted to better understand the reality of higher education in Turkey. Finally, similar studies can also be carried out in different levels of education.

REFERENCES

- Abbott, M. L. (2011). *Understanding educational statistics using Microsoft Excel and SPSS*. John Wiley & Sons, Inc.
- Abualrob, M. (2019). Determinants of building 21st-century skills in Palestinian elementary schools. *Higher Education Studies*, 9, 108-116. <https://doi.org/10.5539/hes.v9n2p108>
- Akyıldız S. T., & Çelik V. (2020) Thinking outside the box: Turkish EFL teachers' perceptions of creativity. *Thinking Skills and Creativity*, 36, 100649. <https://doi.org/10.1016/j.tsc.2020.100649>
- Altunkaya, H., & Çelik, M. E. (2021). Türkçeyi yabancı dil olarak öğretenlerin 21. yüzyıl becerileri yeterlikleri. *Türkiye Sosyal Araştırmalar Dergisi*, 25 (3), 813-826.
- Assesment and Teaching of 21st-century Skills Headquartered University of Melbourne. (2020). *The framework of 21st-century skills as defined by ATC21s*. Assessment and Teaching of 21st-century Skills, <http://www.atc21s.org/>
- Aydın, A., & Tan-Şişman, G. (2021). Hizmet öncesi İngilizce öğretmen eğitiminde 21. yüzyıl becerileri. *Türk Eğitim Bilimleri Dergisi*, 19 (2), 1223-1251. <https://doi.org/10.37217/tebd.975533>
- Balay, R. (2004). Küreselleşme, bilgi toplumu ve eğitim. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 37, 61-82.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. https://doi.org/10.1207/s15326985ep2802_3
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. W. H. F.
- Bapna, A., Sharma, N., Kaushik, A., & Kumar, A. (2017). *Handbook on measuring 21st-century skills*. <https://doi.org/10.13140/RG.2.2.10020.99203>
- Bartlett, M.S. (1954). A note on the multiplying factors for various Chi Square approximations. *Journal of the Royal Statistical Society*, 16 (Series B), 296-8.
- Bassendowski, S. L., & Petrucka, P. (2013). Are 20th-century methods of teaching applicable in the 21st-century? *British Journal of Educational Technology*, 44(4), 665–667. <https://doi.org/10.1111/bjet.12032>

- 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. <https://doi.org/10.17263/jlls.547718>
- Berry, W. D. (1993). *Understanding regression assumptions*. Sage.
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining twenty-first century skills. In Griffin, P., Care, E., & McGaw, B. (Eds.), *Assessment and teaching of 21st-century skills*, (pp. 17–66). https://doi.org/10.1007/978-94-007-2324-5_2
- Boe, C. S. (2013). Have 21st-century skills made their way to the university classroom? A study to examine the extent to which 21st-century skills are being incorporated into the academic programs at a small, private, church-related university. *Education Dissertations and Projects*. 29. https://digitalcommons.gardner-webb.edu/education_etd/29
- Bologna Declaration. (1999). The Bologna Declaration of 19 June 1999, *Joint Declaration of the European Ministers of Education*. https://www.eurashe.eu/library/bologna_1999_bologna-declaration-pdf/
- Butterworth, J., Thwaites, J., & Thwaites, G. (2008). *Thinking skills*. Cambridge: Cambridge University Press.
- Büyüköztürk, Ş. (2012). *Sosyal bilimler için veri analizi el kitabı*. Pegem A Yayıncılık.
- Çalık, T., & Sezgin, F. (2005). Küreselleşme, bilgi toplumu ve eğitim. *Kastamonu Eğitim Dergisi*, 13, 55-66.
- Cambridge international dictionary of English. (1995). Cambridge: Cambridge University Press.
- Charland, J. (2014). Teaching and learning 21st-Century skills in Maine. *Maine Education Policy Research Institute*. 19. https://usm.maine.edu/sites/default/files/cepare/Teaching_and_Learning_21st_Century_Skills_in_Maine.pdf
- Chen Y. (2018). Perceptions of EFL college students toward collaborative learning. *English Language Teaching*, 11(2) 1-4. <http://doi.org/10.5539/elt.v11n2p1>

- Choi, E., Lee, J. (2016). Investigating the relationship of target language proficiency and self-efficacy among nonnative EFL teachers. *System*, 58, 49-63. <https://doi.org/10.1016/j.system.2016.02.010>
- Chowdhury, T. (2021). Fostering learner autonomy through cooperative and collaborative learning. *Shanlax International Journal of Education*, 10(1), 89-95.
- Clark, U., Plappert, G., Pollard, D., Reershemius, G., Grant, T., & Hayes, S. (2017). *Quantitative research methods for linguists: A questions and answers approach for students* (1st Ed.). Routledge. <https://doi.org/10.4324/9781315181707>
- Costan, E., Gonzales, G., Gonzales, R., Enriquez, L., Costan, F., Suladay, D., Atibing, N., Aro, J., Evangelista, S., Maturan, F., Selerio E., Ocampo, L. (2021). Education 4.0 in developing economies: A systematic literature review of implementation barriers and future research agenda. *Sustainability*, 13(22), 12763. <https://doi.org/10.3390/su132212763>
- Council of Higher Education (2010). *National qualifications framework for higher education in Turkey*. <http://tyyc.yok.gov.tr/>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th Ed.). SAGE.
- De Hei, M., Tabacaru, C., Sjoer, E., Rippe R., & Walenkamp, J. (2019). Developing intercultural competence through collaborative learning in International higher education. *Journal of Studies in International Education*, (24)2, 190-211. <https://doi.org/10.1177/1028315319826226>
- Dede, C. (2010). Comparing frameworks for 21st-century Skills. In J. Bellanca and R. Brandt. (Eds.), *21st-century skills rethinking how students learn* (pp. 51-75). Solution Tree Press.
- Demirçelik, E., & Sipahioğlu, M. (2020). Restructuring of higher education in the context of Bologna Process: Reflections on Turkey. *Political Economy and Management of Education*, 1(2), 37-48.
- Dincer, A., Goksu, A., Takkac, A., & Yazici, M. (2013). Common characteristics of an effective English language teacher. *International Journal of Educational Researchers*, 4(3), 1-8.

- Duemler, D., & Mayer, R. E. (1988). Hidden costs of reflectiveness: Aspects of successful scientific reasoning. *Journal of Educational Psychology*, 80(4), 419–423. <https://doi.org/10.1037/0022-0663.80.4.419>
- Eaton, S.E. (2010). *Global trends in language learning in the twenty-first century*. Onate Press.
- Edwards, A.L. (1967). *Statistical methods* (2nd Ed.). Holt.
- Eryilmaz, S. (2020). Öğrencilerin 21. yüzyıl öğrenme becerileri için veri toplama aracı: geçerlik ve güvenirlik çalışması. *Turkish Studies - Information Technologies and Applied Sciences*, 15, 301-323. <https://doi.org/10.47844/TurkishStudies.44127>
- Eslami, Z., & Fatahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of nonnative EFL teachers in Iran. *TESL-EJ*, 11, 1-19.
- Fadel, C., & Trilling, B. (2009). *21st-century skills: Learning for life in our times*. Jossey-Bass.
- Gavora, P. (2010). Slovak pre-service teacher self-efficacy: Theoretical and research considerations. *The New Educational Review*, 21(2), 17-30.
- George, D., & Mallery, M. (2010). *SPSS for Windows step by step: A simple study guide and reference, 17.0 update* (10th Ed.). Allyn & Bacon.
- Germaine, R., Richards, J., Koeller, M., & Schubert-Irastorza, C. (2016). Purposeful use of 21st-century skills in higher education. *Journal of Research in Innovative Teaching*, 9(1), 19-29.
- Ghamrawi, N., Ghamrawi N., & Shal, T. (2017). Lebanese public schools: 20th or 21st-century schools? An investigation into teachers' instructional practices. *Open Journal of Leadership*, 6, 1-20. <https://doi.org/10.4236/ojl.2017.61001>
- Gnanadesikan, R. (1997). *Methods for statistical data analysis of multivariate observations* (2nd Ed.). John Wiley & Sons, Inc.
- Gokhale, A. A. (1995). Collaborative learning enhances critical thinking. *Journal of Technology Education*, 7(1), 22-30. <https://doi.org/10.21061/jte.v7i1.a.2>
- Griffin, P., Care, E., & McGaw, B. (2012). The changing role of education and schools. In P. Griffin et al. (Eds.), *Assessment and teaching of 21st-century skills* (pp. 1-17). Springer. https://doi.org/10.1007/978-94-007-2324-5_1

- Griffin, P., Murray, L., Care, E., Thomas, A., & Perri, P. (2010). Developmental assessment: Lifting literacy through professional learning teams. *Assessment in Education: Principles, Policy and Practice*, 17 (4), 383–397.
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly*, 41(3), 125–149. <https://doi.org/10.1177/0001848191041003001>
- Güneş, F. (2012). Skills and competencies set forth by Bologna Process in higher education. *Journal of Higher Education and Science*, 2(1), 1-9. <https://doi.org/10.5961/jhes.2012.026>
- Harrison, K., O’Hara, J. & McNamara, G. (2015). Re-thinking assessment: Self- and peer-assessment as drivers of self-direction in learning. *Eurasian Journal of Educational Research*, 60, 75-88. <https://doi.org/10.14689/ejer.2015.60.5>
- Hixson, N. K., Ravitz J., & Whisman, A. (2012). *Extended professional development in project-based learning: Impacts on 21st-century teaching and student achievement*. West Virginia Department of Education. Division of Teaching and Learning, Office of Research. Academia, <https://www.academia.edu/1999374>
- Howitt, D., & Cramer D. (2011). *Introduction to SPSS statistics in psychology: For version 19 and earlier* (5th Ed.). Pearson Education Limited.
- Huitt, W. (1998). Critical thinking: An overview. *Educational Psychology Interactive*. Valdosta, GA: Valdosta State University. <http://www.edpsycinteractive.org/topics/cognition/critthnk.html>
- Kalaycı, Ş. (2006). *SPSS uygulamalı çok değişkenli istatistik teknikleri*. Asil Yayıncılık.
- Karalı, Y., & Aydemir, H. (2020). Examining primary school teachers' 21st-century teacher and learner skills. *The Eurasia Proceedings of Educational and Social Sciences*, 17, 50-56.
- Karasar, N. (2007). *Bilimsel araştırma yöntemi* (17. Baskı). Nobel Yayın Dağıtım.
- Kereluik, K., Mishra, P., Fahnoe, C., & Terry, L. (2013). What knowledge is of most worth. *Journal of Digital Learning in Teacher Education*, 29(4), 127–140. <https://doi.org/10.1080/21532974.2013.10784716>
- Kirk, R. E. (2008). *Statistics: An introduction* (5th Ed.). Thomson Higher Education.
- Kivunja, C. (2014). Innovative pedagogies in higher education to become effective teachers of 21st-century skills: Unpacking the learning and innovations skills domain of the new

- learning paradigm. *International Journal of Higher Education*, 3, 37-48.
<https://doi.org/10.5430/ijhe.v3n4p37>
- Kozma, R. B. (2009). Transforming education: Assessing and teaching 21st-century skills. In F. Scheuermann & J. Björnsson. (Eds.), *The transition to computer-based assessment. New approaches to skills assessment and implications for large-scale testing* (pp. 13-23). European Communities.
- Kumaravadivelu, B. (2001). Toward a postmethod pedagogy. *TESOL Quarterly*, 35(4), 537-560. <https://doi.org/10.2307/3588427>
- Laal, M., Laal, M., & Kermanshahi, Z. K. (2012). 21st-century learning: Learning in collaboration. *Procedia - Social and Behavioral Sciences*, 47, 1696–1701. <https://doi.org/10.1016/j.sbspro.2012.06.885>
- Lind, D. A., Marchal, W.G., & Wathen, S. A. (2006). *Basic statistics for business and economics* (5th Ed.). McGraw-Hill.
- Mishra, P., & Mehta, R. (2016). What we educators get wrong about 21st-century learning: Results of a survey. *Journal of Digital Learning in Teacher Education*, 33(1), 6–19. <https://doi.org/10.1080/21532974.2016.1242392>
- Mitchell, M., & Jolley, J. (1988) *Research design explained*. Holt, Rinehart & Winston.
- Moore, B. N., & Parker, R. (2009). *Critical thinking* (9th Ed.). McGraw-Hill.
- Morrison, K., Cohen, L., & Manion, L. (2000). *Research methods in education* (5th Ed.). Routledge. <https://doi.org/10.4324/9780203224342>
- Mugot, D. C., & Sumbalan E. B. (2019). The 21st-Century learning skills and teaching practices of pre-service teachers: Implication to the new Philippine teacher education curriculum. *International Journal of Multidisciplinary Research and Publications*, 2(1), 22-28.
- Nazikian, F., & Park, J. (2016). How to develop “21st-century skills” in foreign language education. *Japanese Language and Literature*, 50(2), 347–373.
- OECD (2019). OECD future of education and skills 2030: OECD learning compass 2030. https://www.oecd.org/education/2030-project/teaching-and-learning/learning/learning-compass-2030/OECD_Learning_Compass_2030_Concept_Note_Series.pdf

- Otlu, Ş. (2020). *Exploring language teachers' 21st-century skills practices and perceptions*. (Publication No. 633851) [Master's thesis, Çağ University]. Yüksek Öğretim Kurulu Ulusal Tez Merkezi.
- Özdamar, K. (2004). *Paket programlar ile istatistiksel veri analizi (Çok değişkenli analizler)*. Kaan Kitabevi.
- Ozkara, B. (2019). An Investigation into the relationship between Turkish EFL teachers' self-efficacy and burnout level. *Journal of Family, Counseling and Education*, 4 (1), 12-24. <https://doi.org/10.32568/jfce.504499>
- Partnership for 21st-century Skills (P21). (2019). *Framework for 21st-century learning*. Battelle for Kids. http://static.battelleforkids.org/documents/p21/P21_Framework_Brief.pdf
- Pelgrum, W. J. (2001). Obstacles to the integration of ICT in education: Results from a worldwide educational assessment. *Computers and Education*, 37(2), 163-178.
- Prensky, M. (2001). Digital natives, digital immigrants' part 1. *On the Horizon*, 9(5), 1-6. <https://doi.org/10.1108/10748120110424816>
- Rezaee, R., & Mosalanejad, L. (2015). The effects of case-based team learning on students' learning, self-regulation, and self-direction. *Global Journal of Health Science*, 7(4), 295-306. <https://doi.org/10.5539/gjhs.v7n4p295>
- Richards, J. C. (2013). Creativity in language teaching. *Iranian Journal of Language Teaching Research*, 1(3), 19-43.
- Saavedra, A. R., & Opfer, V. D. (2012). *Teaching and learning 21st-century skills: Lessons from the learning sciences*. RAND.
- Salmon, G. (2019). May the fourth be with you: Creating education 4.0. *Journal of Learning for Development*, 6(1), 95-115.
- Saygılı, S. (2013). Sanayi toplumundan bilgi toplumuna geçiş sürecinde eğitimde dönüştürücü bir entelektüel olarak öğretmenler. *Uşak Üniversitesi Sosyal Bilimler Dergisi (Özel Sayı)*, 263-274.
- Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, 3, 749-752.
- Sharma, S. (1996). *Applied multivariate techniques*. John Wiley & Sons Inc.

- Shear, L., Novais, G., Means, B., Gallagher, L., & Langworthy, M. (2010). *ITL research design*. SRI International.
http://itlresearch.com/images/stories/reports/ITL%20Research%20design_15%20Nov%20201.pdf
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using Multivariate Statistics*. Harper Collins College.
- Tabachnick, B.G., & Fidell, L.S. (2013). *Using multivariate statistics* (6th Ed.). Pearson Education.
- Tavşancıl, E. (2014). *Tutumların ölçülmesi ve SPSS ile veri analizi* (5. Baskı). Nobel Yayınevi.
- The Cambridge Life Competencies Framework. (2020). Cambridge University Press.
https://www.cambridge.org/gb/files/6615/9741/7863/CambridgeLifeCompetencies_Introduction_Booklet_digitalPDF_082020.pdf
- The William and Flora Hewlett Foundation. (2010). *Education Program Strategic Plan*.
http://www.hewlett.org/uploads/documents/Education_Strategic_Plan_2010.pdf
- The William and Flora Hewlett Foundation. (2013). *Deeper learning defined*.
<http://www.hewlett.org/library/hewlett-foundation-publication/deeper-learning-defined>
- Tican, C. & Deniz, S. (2019). Pre-service teachers' opinions about the use of 21st-century learner and 21st-century teacher skills. *European Journal of Educational Research*, 8 (1), 181-197. <https://doi.org/10.12973/eu-jer.8.1.181>
- Toffler, A. (1980). *The third wave*. Morrow.
- Topkaya, E. Z. (2010). Pre-service English Language teachers' perceptions of computer self-efficacy and general self-efficacy. *Turkish Online Journal of Educational Technology-TOJET*, 9(1), 143-156.
- Totten, S. (1991). *Cooperative learning: A Guide to research*. Sills, T., Digby, A. & Ross, P. (Eds.). Garland Publishing.
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, 68(2), 202-248.
<https://doi.org/10.3102/00346543068002202>
- Turkish Higher Education Quality Council (THEQC). (2019). *2018 – 2019 yükseköğretim değerlendirme ve kalite güvencesi durum raporu*.

https://yokak.gov.tr/Common/Docs/Site_Activity_Reports/20182019DurumRaporuv3.pdf.

- Varol, B. (2018). Evaluation of an English language teacher education program from student teachers' perspectives: A case from Turkey. *Uluslararası Alan Eğitimi Dergisi*, 4(2), 83-96. <https://doi.org/10.32570/ijofe.476191>
- Velinova-Sokolova, N. (2021). Higher education and COVID 19 in conditions of education 4.0. *International Scientific Journal "Industry 4.0"*, 4, 165-168.
- Vu, H., & Shah, M. (2016). Vietnamese students' self-direction in learning English listening skills. *Asian Englishes*, 18(1), 53–66. <https://doi.org/10.1080/13488678.2015.1136104>
- Vural Yılmaz, D. (2016). Bologna reforms on the field: Views from coordinators at Turkish universities. *Journal of International Social Research*, 9(47), 944-953.
- Vural Yılmaz, D., & Tütünsatar, A. (2017). Bologna process, Europeanization and Turkish higher education: A research from the field. *SDU Faculty of Arts and Sciences Journal of Social Sciences*, 42, 227-246.
- Wilcox, D., Liu, J. C., Thall, J., & Howley, T. (2017). Integration of teaching practice for students' 21st-century skills: Faculty practice and perception. *International Journal of Technology in Teaching and Learning*, 13(2), 55-77.
- Wilcox, R. R. (2012b). *Modern statistics for the social and behavioral sciences: A practical introduction*. Chapman & Hall/CRC Press.
- Yıldırım, R. & Ortak, Ş. (2021). Otantik öğrenme yaklaşımının sosyal bilgiler dersinde 21. yüzyıl öğrenme ve yenilenme becerilerinin gelişimine etkisi. *Uluslararası Sosyal ve Eğitim Bilimleri Dergisi*, 15, 69-90.
- Zaitseva N. (2020). Developing English presentation skills as a component of collaboration competence for sustainable development. *E3S Web of Conferences*, 166, 10007. <https://doi.org/10.1051/e3sconf/202016610007>
- Zhang, H., Yuan, R., & He, X. (2020). Investigating university EFL teachers' perceptions of critical thinking and its teaching: Voices from China. *Asia-Pacific Education Researcher*, 29, 483–493. <https://doi.org/10.1007/s40299-020-00500-6>

APPENDICES

Appendix 1. 21st-century Teaching and Learning Questionnaire

14.11.2021 15:36

Survey for Measuring 21st Century Teaching and Learning

Survey for Measuring 21st Century Teaching and Learning

Dear Colleagues,

I am an MA student at Akdeniz University English Language Education master's program. I am collecting data for my thesis titled "English Preparatory Program Lecturers' Practices and Self-efficacy Beliefs on Teaching 21st-Century Skills in Classrooms" under the supervision of Assoc.Prof.Dr. Hüseyin KAFES.

This study aims to determine to what extent instructors at the School of Foreign Languages English Preparatory Department teach and assess 21st Century skills in their classroom and to what extent they find themselves competent in teaching these skills. For this purpose, "21st Century Teaching and Learning" survey will be applied to volunteer participants.

The questionnaire consists of 2 separate main parts. The first of these is the demographic information form prepared in Turkish/English, and the other is the "21st Century Teaching and Learning" questionnaire, which is in English, adapted from Hixson, Ravitz & Whisman (2012). "The 21st Century Teaching and Learning questionnaire" consists of 8 separate sub-sections. The response time of the questionnaire is approximately 12 minutes. Questionnaire questions are not limited to online education. You can answer the questions according to your usual classroom practices.

The target group of this questionnaire is the academic staff who have worked at least one semester at the School of Foreign Languages English Preparatory units and are still working. Participation in the survey is voluntary. You can withdraw from the study at any point. If you do not submit the survey, your answers will be invalid.

The data obtained here will only be used for my thesis and will not be shared with third parties. The questionnaire will be filled in anonymously, and the participant names will not be used in the thesis.

I would like to thank you for spending your precious time and contributing to my work.

For your questions, you can contact me via e-mail.

Sinem BİL BEN
Akdeniz Üniversitesi

*Anketi tamamlama süresi tahmini 12 dakikadır.
**The survey is adapted from Hixson, Ravitz & Whisman (2012).
***The framework in the survey is formed from the international Innovative Teaching and Learning study by Shear, Novais, Means, Gallagher, & Langworthy (2010), Deeper Learning

https://docs.google.com/forms/d/1T-CG3YoyB3XOEpkhTbprO2I_e7LdXBuAqHo4d9S8gJedI

1/22

14.11.2021 15:36

Survey for Measuring 21st Century Teaching and Learning

framework from The William and Flora Hewlett Foundation (2010), and Partnership for 21st Century Skills (p21.org).

* Gerekli

1. Çalışmaya katılmak ve ankete devam edebilmek için aşağıdaki açıklamada bulunan linke tıklayarak Katılımcı Beyan Formunu okuyup, onaylayınız. (In order to participate in the study and continue the survey, read and confirm the Participant Consent Form by clicking the link in the explanation below.) (Katılımcı Beyan Formunu okudum, anladım ve onaylıyorum. : I have read, understood and approve the Participant Consent Form.) *

Uygun olanları tümünü işaretleyin.

☐ Katılımcı Beyan Formunu okudum, anladım ve onaylıyorum.

Değerli katılımcılar,

Bu bölüm 7 sorudan oluşmaktadır. Bir sonraki bölüme geçebilmek için soruların hepsine cevap vermeniz gerekmektedir. Araştırma sonuçlarının güvenilir olabilmesi için, sizlere sorulacak olan demografik bilgilere doğru ve samimi cevaplar veriniz. Bu bilgiler sadece tez için kullanılacak olup, üçüncü kişiler ile paylaşılmayacaktır.

Dear participants,

This section consists of 7 questions. You have to answer all of the questions to move on to the next section. Please give accurate and sincere answers to the demographic information that will be asked to you. This information will only be used for the thesis and will not be shared with third parties.

Demografik Bilgiler

2. 1. Çalışmakta Olduğunuz Kurumun Adı (Name of the Institution you work for) *

3. 2. Çalışmakta Olduğunuz Kurumun Türü (The Type of Institution you work for) (Devlet: State ; Vakıf/Özel: Foundation) *

Yalnızca bir şıkki işaretleyin.

☐ Devlet

☐ Vakıf/Özel

https://docs.google.com/forms/d/1T-CG3YoyB3XOEpkhTbprO2I_e7LdXBuAqHo4d9S8gJedI

2/22

14.11.2021 15:36

Survey for Measuring 21st Century Teaching and Learning

4. 3. Eğitim Durumunuz (Level of Education) (Lisans: Undergraduate; Yüksek Lisans: Graduate; Doktora: Doctorate) *

Yalnızca bir şıkki işaretleyin.

☐ Lisans

☐ Yüksek Lisans

☐ Doktora

5. 4. Yabancı Diller Hazırlık Biriminde kaç yıllık tecrübeye sahipsiniz? (How many years of experience do you have in the School of Foreign Languages Preparatory Unit?) (Akademik dönem: semester; yıl: year; x yıl ve fazlası: x years or more) *

Yalnızca bir şıkki işaretleyin.

☐ 1 Akademik Dönem

☐ 1-5 yıl

☐ 5-8 yıl

☐ 9-10 yıl ve fazlası

6. 5. Daha önce "21. Yüzyılda Eğitim" ya da "21. Yüzyıl Becerileri" hakkında herhangi bir bilgiye sahip miydiniz? (Do you know anything about "Education in the 21st Century" or "21st Century Skills"?) (Evet: YES; Hayır: NO) *

Yalnızca bir şıkki işaretleyin.

☐ Evet

☐ Hayır

https://docs.google.com/forms/d/1T-CG3YoyB3XOEpkhTbprO2I_e7LdXBuAqHo4d9S8gJedI

3/22

14.11.2021 15:36

Survey for Measuring 21st Century Teaching and Learning

7. 6. 2020-2021 Güz Dönemi'nde verdiğiniz derslerde, öğrencileriniz 1 hafta ya da daha fazla hazırlık süresi gerektiren kaç tane ödev, proje veya araştırma tamamladı? (How many assignments, projects, or research have your students completed requiring preparation that lasts one week or more in the 2020-2021 Fall Semester?) (ve daha fazla: and more) *

Yalnızca bir şıkki işaretleyin.

☐ 0

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6 ve daha fazla

8. 7. 2020-2021 Güz Dönemi boyunca toplam ders saatinizin yüzde kaçını bu 1 hafta ya da daha fazla hazırlık süresi gerektiren ödevlere/projelere/araştırmalara adanmış? (During the Fall Semester of 2020-2021, what percentage of your total course hours did you devote to assignments/projects/research that required one week or more preparation time?) *

Yalnızca bir şıkki işaretleyin.

☐ 0-10%

☐ 11-25%

☐ 26-50%

☐ 51-75%

☐ 76-100%

https://docs.google.com/forms/d/1T-CG3YoyB3XOEpkhTbprO2I_e7LdXBuAqHo4d9S8gJedI

4/22

21st Century Teaching and Learning Survey [WVDE-CIS-28]

Critical Thinking Skills

The rest of this survey asks about your teaching practices that might support students' learning of the following 21st century skills.

Critical Thinking
Collaboration
Communication
Creativity & Innovation
Self-Direction
Making Global Connections
Making Local Connections
Using Technology as a Tool for Learning

For each of the above you will be asked about your general teaching of these skills, and about a few specific practices you may have used.

There are no correct or incorrect answers and all responses will be kept confidential.

The research is based on your general attitude and thoughts about your teaching. (Online and Face to face)

CRITICAL THINKING SKILLS refer to students being able to analyze complex problems, investigate questions for which there are no clear-cut answers, evaluate different points of view or sources of information, and draw appropriate conclusions based on evidence and reasoning.

9. 1. Here are some examples of practices that may help students learn CRITICAL THINKING SKILLS. *

In your teaching of your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkki işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Compare information from different sources before completing a task or assignment?	☐	☐	☐	☐	☐
b. Draw their own conclusions based on analysis of numbers, facts, or relevant information?	☐	☐	☐	☐	☐
c. Summarize or create their own interpretation of what they have read or been taught?	☐	☐	☐	☐	☐
d. Analyze competing arguments, perspectives or solutions to a problem?	☐	☐	☐	☐	☐
e. Develop a persuasive argument based on supporting evidence or reasoning?	☐	☐	☐	☐	☐
f. Try to solve complex problems or answer questions that have no single correct solution or answer?	☐	☐	☐	☐	☐

10. 2. To what extent do you agree with these statements about your TARGET CLASS? *

Her satırda yalnızca bir şıkki işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' critical thinking skills	☐	☐	☐	☐	☐
b. Most students have learned critical thinking skills while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' critical thinking skills	☐	☐	☐	☐	☐

COLLABORATION SKILLS

COLLABORATION SKILLS refer to students being able to work together to solve problems or answer questions, to work effectively and respectfully in teams to accomplish a common goal and to assume shared responsibility for completing a task.

11. 1. Here are some examples of practices that may help students learn COLLABORATION SKILLS. *

In your teaching of your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkki işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Work in pairs or small groups to complete a task together?	☐	☐	☐	☐	☐
b. Work with other students to set goals and create a plan for their team?	☐	☐	☐	☐	☐
c. Create joint products using contributions from each student?	☐	☐	☐	☐	☐
d. Present their group work to the class, teacher or others?	☐	☐	☐	☐	☐
e. Work as a team to incorporate feedback on group tasks or products?	☐	☐	☐	☐	☐
f. Give feedback to peers or assess other students' work	☐	☐	☐	☐	☐

12. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkki işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' collaboration skills	☐	☐	☐	☐	☐
b. Most students have learned collaboration skills while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' collaboration skills	☐	☐	☐	☐	☐

COMMUNICATION SKILLS

COMMUNICATION SKILLS refer to students being able to organize their thoughts, data and findings and share these effectively through a variety of media, as well as orally and in writing.

13. 1. Here are some examples of practices that may help students learn COMMUNICATION SKILLS. *
- In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkki işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Structure data for use in written products or oral presentations (e.g., creating charts, tables or graphs)?	☐	☐	☐	☐	☐
b. Convey their ideas using media other than a written paper (e.g., posters, video, blogs, etc.)	☐	☐	☐	☐	☐
c. Prepare and deliver an oral presentation to the teacher or others?	☐	☐	☐	☐	☐
d. Answer questions in front of an audience?	☐	☐	☐	☐	☐
e. Decide how they will present their work or demonstrate their learning?	☐	☐	☐	☐	☐

14. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkki işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' communication skills	☐	☐	☐	☐	☐
b. Most students have learned communication skills while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' communication skills	☐	☐	☐	☐	☐

CREATIVITY AND INNOVATION SKILLS

CREATIVITY AND INNOVATION SKILLS refer to students being able to generate and refine solutions to complex problems or tasks based on synthesis, analysis and then combining or presenting what they have learned in new and original ways.

15. 1. Here are some examples of practices that may help students learn CREATIVITY AND INNOVATION SKILLS. *
- In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkki işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Use idea creation techniques such as brainstorming or concept mapping?	☐	☐	☐	☐	☐
b. Generate their own ideas about how to confront a problem or question?	☐	☐	☐	☐	☐
c. Test out different ideas and work to improve them?	☐	☐	☐	☐	☐
d. Invent a solution to a complex, open-ended question or problem?	☐	☐	☐	☐	☐
e. Create an original product or performance to express their ideas?	☐	☐	☐	☐	☐

14.11.2021 15:36 Survey for Measuring 21st Century Teaching and Learning

16. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkla işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' creativity and innovation skills	☐	☐	☐	☐	☐
b. Most students have learned creativity and innovation skills while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' creativity and innovation skills	☐	☐	☐	☐	☐

SELF-DIRECTION SKILLS

SELF-DIRECTION SKILLS refer to students being able to take responsibility for their learning by identifying topics to pursue and processes for their own learning, and being able to review their own work and respond to feedback.

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTv6pnQZl_e7LdXBuKQho4d9S8g/edit 13/22

14.11.2021 15:36 Survey for Measuring 21st Century Teaching and Learning

17. 1. Here are some examples of practices that may help students learn SELF-DIRECTION SKILLS. *

In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkla işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Take initiative when confronted with a difficult problem or question?	☐	☐	☐	☐	☐
b. Choose their own topics of learning or questions to pursue?	☐	☐	☐	☐	☐
c. Plan the steps they will take to accomplish a complex task?	☐	☐	☐	☐	☐
d. Choose for themselves what examples to study or resources to use?	☐	☐	☐	☐	☐
e. Monitor their own progress towards completion of a complex task and modify their work accordingly?	☐	☐	☐	☐	☐
f. Use specific criteria to assess the quality of their work before it is completed?	☐	☐	☐	☐	☐
g. Use peer, teacher or expert feedback to revise their work?	☐	☐	☐	☐	☐

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTv6pnQZl_e7LdXBuKQho4d9S8g/edit 14/22

14.11.2021 15:36 Survey for Measuring 21st Century Teaching and Learning

18. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkla işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' self-direction skills	☐	☐	☐	☐	☐
b. Most students have learned self-direction skills while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' self-direction skills	☐	☐	☐	☐	☐

GLOBAL CONNECTIONS

GLOBAL CONNECTIONS refers to students being able to understand global, geo-political issues including awareness of geography, culture, language, history, and literature from other countries.

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTv6pnQZl_e7LdXBuKQho4d9S8g/edit 15/22

14.11.2021 15:36 Survey for Measuring 21st Century Teaching and Learning

19. 1. Here are some examples of practices that may help students learn to make GLOBAL CONNECTIONS. *

In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkla işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Study information about other countries or cultures?	☐	☐	☐	☐	☐
b. Use information or ideas that come from people in other countries or cultures?	☐	☐	☐	☐	☐
c. Discuss issues related to global interdependency (for example, global environment trends, global market economy)?	☐	☐	☐	☐	☐
d. Understand the life experiences of people in cultures besides their own?	☐	☐	☐	☐	☐
e. Study the geography of distant countries?	☐	☐	☐	☐	☐
f. Reflect on how their own experiences and local issues are connected to global issues?	☐	☐	☐	☐	☐

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTv6pnQZl_e7LdXBuKQho4d9S8g/edit 16/22

14.11.2021 15:36
Survey for Measuring 21st Century Teaching and Learning

20. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkla işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' skills in making global connections	☐	☐	☐	☐	☐
b. Most students have learned to make global connections while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' skills in making global connections	☐	☐	☐	☐	☐

LOCAL CONNECTIONS

LOCAL CONNECTIONS refers to students being able to apply what they have learned to local contexts and community issues.

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTvpnrO2I_e7LdXBukGho4d9S8g/edit
17/22

14.11.2021 15:36
Survey for Measuring 21st Century Teaching and Learning

21. 1. Here are some examples of practices that may help students learn to make LOCAL CONNECTIONS.

In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkla işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Investigate topics or issues that are relevant to their family or community?	☐	☐	☐	☐	☐
b. Apply what they are learning to local situations, issues or problems?	☐	☐	☐	☐	☐
c. Talk to one or more members of the community about a class project or activity?	☐	☐	☐	☐	☐
d. Analyze how different stakeholder groups or community members view an issue?	☐	☐	☐	☐	☐
e. Respond to a question or task in a way that weighs the concerns of different community members or groups?	☐	☐	☐	☐	☐

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTvpnrO2I_e7LdXBukGho4d9S8g/edit
18/22

14.11.2021 15:36
Survey for Measuring 21st Century Teaching and Learning

22. 2. To what extent do you agree with these statements about your TARGET CLASS?

Her satırda yalnızca bir şıkla işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' skills in making local connections	☐	☐	☐	☐	☐
b. Most students have learned to make local connections while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' skills in making local connections	☐	☐	☐	☐	☐

USING TECHNOLOGY AS A TOOL FOR LEARNING

USING TECHNOLOGY AS A TOOL FOR LEARNING refers to students being able to manage their learning and produce products using appropriate information and communication technologies.

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTvpnrO2I_e7LdXBukGho4d9S8g/edit
19/22

14.11.2021 15:36
Survey for Measuring 21st Century Teaching and Learning

23. 1. Here are some examples of practices that may help students learn to USE TECHNOLOGY AS A TOOL FOR LEARNING.

In your TARGET CLASS, how often have you asked students to do the following

Her satırda yalnızca bir şıkla işaretleyin.

	Almost never	A few times a semester	1-3 times per month	1-3 times per week	Almost daily
a. Use technology or the Internet for self-instruction (e.g., Kahn Academy or other videos, tutorials, self-instructional websites, etc.)?	☐	☐	☐	☐	☐
b. Select appropriate technology tools or resources for completing a task?	☐	☐	☐	☐	☐
c. Evaluate the credibility and relevance of online resources?	☐	☐	☐	☐	☐
d. Use technology to analyze information (e.g., databases, spreadsheets, graphic programs, etc.)?	☐	☐	☐	☐	☐
e. Use technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.)?	☐	☐	☐	☐	☐
f. Use technology to support team work or collaboration (e.g., shared work spaces, email exchanges, giving and receiving feedback, etc.)?	☐	☐	☐	☐	☐
g. Use technology to interact directly with	☐	☐	☐	☐	☐

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpKhTvpnrO2I_e7LdXBukGho4d9S8g/edit
20/22

experts or members of
local/global communities?

h. Use technology to keep
track of their work on
extended tasks or
assignments?

☐ ☐ ☐ ☐ ☐

24. 2. To what extent do you agree with these statements about your TARGET CLASS?

*

Her satırda yalnızca bir şıkla işaretleyin.

	Not really	To a minor extent	To a moderate extent	To a great extent	To a very great extent
a. I have tried to develop students' skills in using technology as a tool for learning	☐	☐	☐	☐	☐
b. Most students have learned to use technology as a tool for learning while in my class	☐	☐	☐	☐	☐
c. I have been able to effectively assess students' skills in using technology for learning	☐	☐	☐	☐	☐

**THANK YOU for
COMPLETING
THE SURVEY!**

Dear Participants,
I appreciate your patience and contributions to my study. If you have questions
about this survey, please contact me via email. This page will close when you
click Send.

Sinem Bilben

Bu içerik Google tarafından oluşturulmamış veya onaylanmamıştır.

https://docs.google.com/forms/d/1T-CG3YoyB3XQEpkhTvbnpO2I_e7LdXBukGho4di9S8g/edit

21/22

Appendix 2. The results of Frequency Analysis of 21st-Century Skills Teaching Practices

In your teaching of your target class, how often have you asked students to do the following.		n	%
1. Here are some examples of practices that may help students learn CRITICAL THINKING SKILLS .			
a. Compare information from different sources before completing a task or assignment	Almost never	13	13,30%
	A few times a semester	30	30,60%
	1-3 times per month	21	21,40%
	1-3 times per week	26	26,50%
	Almost daily	8	8,20%
b. Draw their own conclusions based on analysis of numbers, facts, or relevant information	Almost never	7	7,10%
	A few times a semester	23	23,50%
	1-3 times per month	26	26,50%
	1-3 times per week	22	22,40%
	Almost daily	20	20,40%
c. Summarize or create their own interpretation of what they have read or been taught	Almost never	2	2,00%
	A few times a semester	18	18,40%
	1-3 times per month	23	23,50%
	1-3 times per week	25	25,50%
	Almost daily	30	30,60%
d. Analyze competing arguments, perspectives, or solutions to a problem?	Almost never	8	8,20%
	A few times a semester	17	17,30%
	1-3 times per month	31	31,60%
	1-3 times per week	26	26,50%
	Almost daily	16	16,30%
e. Develop a persuasive argument based on supporting evidence or reasoning?	Almost never	6	6,10%
	A few times a semester	21	21,40%
	1-3 times per month	28	28,60%
	1-3 times per week	26	26,50%
	Almost daily	17	17,30%
f. Try to solve complex problems or answer questions that have no single correct solution or answer?	Almost never	14	14,30%
	A few times a semester	21	21,40%
	1-3 times per month	23	23,50%
	1-3 times per week	25	25,50%
	Almost daily	15	15,30%
2. Here are some examples of practices that may help students learn COLLABORATION SKILLS .			
a. Work in pairs or small groups to complete a task together	Almost never	3	3,10%

In your teaching of your target class, how often have you asked students to do the following.		n	%
	A few times a semester	9	9,20%
	1-3 times per month	14	14,30%
	1-3 times per week	20	20,40%
	Almost daily	52	53,10%
	Almost never	11	11,20%
b. Work with other students to set goals and create a plan for their team	A few times a semester	11	11,20%
	1-3 times per month	22	22,40%
	1-3 times per week	35	35,70%
	Almost daily	19	19,40%
	Almost never	10	10,20%
c. Create joint products using contributions from each student	A few times a semester	14	14,30%
	1-3 times per month	21	21,40%
	1-3 times per week	35	35,70%
	Almost daily	18	18,40%
	Almost never	11	11,20%
d. Present their group work to the class, teacher, or others	A few times a semester	15	15,30%
	1-3 times per month	21	21,40%
	1-3 times per week	34	34,70%
	Almost daily	17	17,30%
	Almost never	15	15,30%
e. Work as a team to incorporate feedback on group tasks or products	A few times a semester	16	16,30%
	1-3 times per month	26	26,50%
	1-3 times per week	30	30,60%
	Almost daily	11	11,20%
	Almost never	12	12,20%
f. Give feedback to peers or assess other students' work	A few times a semester	19	19,40%
	1-3 times per month	21	21,40%
	1-3 times per week	28	28,60%
	Almost daily	18	18,40%
	Almost never	19	19,40%
3. Here are some examples of practices that may help students learn COMMUNICATION SKILLS .			
a. Structure data for use in written products or oral presentations (e.g., creating charts, tables, or graphs)	Almost never	19	19,40%
	A few times a semester	26	26,50%
	1-3 times per month	21	21,40%
	1-3 times per week	23	23,50%
	Almost daily	9	9,20%
b. Convey their ideas using media other than a written paper (e.g., posters, video, blogs, etc.)	Almost never	4	4,10%
	A few times a semester	22	22,40%
	1-3 times per month	35	35,70%
	1-3 times per week	31	31,60%
	Almost daily	18	18,40%

In your teaching of your target class, how often have you asked students to do the following.		n	%
c. Prepare and deliver an oral presentation to the teacher or others	Almost daily	6	6,10%
	Almost never	3	3,10%
	A few times a semester	25	25,50%
	1-3 times per month	29	29,60%
	1-3 times per week	35	35,70%
d. Answer questions in front of an audience	Almost daily	6	6,10%
	Almost never	5	5,10%
	A few times a semester	19	19,40%
	1-3 times per month	15	15,30%
	1-3 times per week	23	23,50%
e. Decide how they will present their work or demonstrate their learning	Almost daily	36	36,70%
	Almost never	7	7,10%
	A few times a semester	24	24,50%
	1-3 times per month	24	24,50%
	1-3 times per week	31	31,60%
4. Here are some examples of practices that may help students learn CREATIVITY AND INNOVATION SKILLS .		12	12,20%
a. Use idea creation techniques such as brainstorming or concept mapping	Almost never	1	1,00%
	A few times a semester	13	13,30%
	1-3 times per month	22	22,40%
	1-3 times per week	35	35,70%
	Almost daily	27	27,60%
b. Generate their own ideas about how to confront a problem or question	Almost never	4	4,10%
	A few times a semester	8	8,20%
	1-3 times per month	28	28,60%
	1-3 times per week	32	32,70%
	Almost daily	26	26,50%
c. Test out different ideas and work to improve them	Almost never	6	6,10%
	A few times a semester	18	18,40%
	1-3 times per month	30	30,60%
	1-3 times per week	27	27,60%
	Almost daily	17	17,30%
d. Invent a solution to a complex, open-ended question, or problem	Almost never	8	8,20%
	A few times a semester	13	13,30%
	1-3 times per month	29	29,60%
	1-3 times per week	21	21,40%
	Almost daily	27	27,60%
e. Create an original product or performance to express their ideas	Almost never	7	7,10%
	A few times a semester	25	25,50%
	1-3 times per month	23	23,50%

In your teaching of your target class, how often have you asked students to do the following.		n	%
	1-3 times per week	32	32,70%
	Almost daily	11	11,20%
5. Here are some examples of practices that may help students learn SELF-DIRECTION SKILLS .			
a. Take initiative when confronted with a difficult problem or question?	Almost never	15	15,30%
	A few times a semester	19	19,40%
	1-3 times per month	25	25,50%
	1-3 times per week	24	24,50%
	Almost daily	15	15,30%
b. Choose their own topics of learning or questions to pursue?	Almost never	12	12,20%
	A few times a semester	23	23,50%
	1-3 times per month	30	30,60%
	1-3 times per week	25	25,50%
	Almost daily	8	8,20%
c. Plan the steps they will take to accomplish a complex task?	Almost never	6	6,10%
	A few times a semester	23	23,50%
	1-3 times per month	26	26,50%
	1-3 times per week	32	32,70%
	Almost daily	11	11,20%
d. Choose for themselves what examples to study or resources to use?	Almost never	16	16,30%
	A few times a semester	16	16,30%
	1-3 times per month	21	21,40%
	1-3 times per week	32	32,70%
	Almost daily	13	13,30%
e. Monitor their own progress towards completion of a complex task and modify their work accordingly?	Almost never	12	12,20%
	A few times a semester	16	16,30%
	1-3 times per month	22	22,40%
	1-3 times per week	35	35,70%
	Almost daily	13	13,30%
f. Use specific criteria to assess the quality of their work before it is completed?	Almost never	12	12,20%
	A few times a semester	18	18,40%
	1-3 times per month	17	17,30%
	1-3 times per week	42	42,90%
	Almost daily	9	9,20%
g. Use peer, teacher, or expert feedback to revise their work	Almost never	5	5,10%
	A few times a semester	18	18,40%
	1-3 times per month	15	15,30%
	1-3 times per week	44	44,90%
	Almost daily	16	16,30%

In your teaching of your target class, how often have you asked students to do the following.			n	%
6. Here are some examples of practices that may help students learn to make GLOBAL CONNECTIONS .				
a. Study information about other countries or cultures	Almost never		3	3,10%
	A few times a semester		20	20,40%
	1-3 times per month		26	26,50%
	1-3 times per week		29	29,60%
	Almost daily		20	20,40%
b. Use information or ideas that come from people in other countries or cultures	Almost never		8	8,20%
	A few times a semester		16	16,30%
	1-3 times per month		29	29,60%
	1-3 times per week		30	30,60%
	Almost daily		15	15,30%
c. Discuss issues related to global interdependency (for example, global environment trends, global market economy)	Almost never		6	6,10%
	A few times a semester		19	19,40%
	1-3 times per month		29	29,60%
	1-3 times per week		24	24,50%
	Almost daily		20	20,40%
d. Understand the life experiences of people in cultures besides their own	Almost never		3	3,10%
	A few times a semester		16	16,30%
	1-3 times per month		26	26,50%
	1-3 times per week		29	29,60%
	Almost daily		24	24,50%
e. Study the geography of distant countries?	Almost never		21	21,40%
	A few times a semester		33	33,70%
	1-3 times per month		33	33,70%
	1-3 times per week		7	7,10%
	Almost daily		4	4,10%
f. Reflect on how their own experiences and local issues are connected to global issues?	Almost never		7	7,10%
	A few times a semester		31	31,60%
	1-3 times per month		21	21,40%
	1-3 times per week		26	26,50%
	Almost daily		13	13,30%
7. Here are some examples of practices that may help students learn to make LOCAL CONNECTIONS .				
a. Investigate topics or issues that are relevant to their family or community	Almost never		5	5,10%
	A few times a semester		19	19,40%
	1-3 times per month		26	26,50%
	1-3 times per week		31	31,60%
	Almost daily		17	17,30%

In your teaching of your target class, how often have you asked students to do the following.		n	%
b. Apply what they are learning to local situations, issues, or problems	Almost never	7	7,10%
	A few times a semester	19	19,40%
	1-3 times per month	31	31,60%
	1-3 times per week	27	27,60%
	Almost daily	14	14,30%
c. Talk to one or more members of the community about a class project or activity	Almost never	28	28,60%
	A few times a semester	25	25,50%
	1-3 times per month	24	24,50%
	1-3 times per week	14	14,30%
	Almost daily	7	7,10%
d. Analyze how different stakeholder groups or community members view an issue	Almost never	29	29,60%
	A few times a semester	28	28,60%
	1-3 times per month	23	23,50%
	1-3 times per week	14	14,30%
	Almost daily	4	4,10%
e. Respond to a question or task in a way that weighs the concerns of different community members or groups?	Almost never	26	26,50%
	A few times a semester	24	24,50%
	1-3 times per month	28	28,60%
	1-3 times per week	14	14,30%
	Almost daily	6	6,10%
8. Here are some examples of practices that may help students learn to USE TECHNOLOGY AS A TOOL FOR LEARNING.			
a. Use technology or the Internet for self-instruction (e.g., Kahn Academy or other videos, tutorials, self-instructional websites, etc.)	Almost never	2	2,00%
	A few times a semester	12	12,20%
	1-3 times per month	17	17,30%
	1-3 times per week	25	25,50%
	Almost daily	42	42,90%
b. Select appropriate technology tools or resources for completing a task	Almost never	2	2,00%
	A few times a semester	6	6,10%
	1-3 times per month	14	14,30%
	1-3 times per week	30	30,60%
	Almost daily	46	46,90%
c. Evaluate the credibility and relevance of online resources	Almost never	18	18,40%
	A few times a semester	10	10,20%
	1-3 times per month	21	21,40%
	1-3 times per week	23	23,50%
	Almost daily	26	26,50%
d. Use technology to analyze information (e.g., databases, spreadsheets, graphic programs, etc.)	Almost never	17	17,30%

In your teaching of your target class, how often have you asked students to do the following.		n	%
	A few times a semester	15	15,30%
	1-3 times per month	23	23,50%
	1-3 times per week	16	16,30%
	Almost daily	27	27,60%
	Almost never	0	0,00%
e. Use technology to help them share information (e.g., multi-media presentations using sound or video, presentation software, blogs, podcasts, etc.)	A few times a semester	13	13,30%
	1-3 times per month	11	11,20%
	1-3 times per week	32	32,70%
	Almost daily	42	42,90%
	Almost never	6	6,10%
f. Use technology to support teamwork or collaboration (e.g., shared workspaces, email exchanges, giving and receiving feedback, etc.)	A few times a semester	6	6,10%
	1-3 times per month	21	21,40%
	1-3 times per week	21	21,40%
	Almost daily	44	44,90%
	Almost never	34	34,70%
g. Use technology to interact directly with experts or members of local/global communities	A few times a semester	13	13,30%
	1-3 times per month	17	17,30%
	1-3 times per week	13	13,30%
	Almost daily	21	21,40%
	Almost never	7	7,10%
h. Use technology to keep track of their work on extended tasks or assignments	A few times a semester	11	11,20%
	1-3 times per month	13	13,30%
	1-3 times per week	29	29,60%
	Almost daily	38	38,80%
	Almost never	0	0,00%

Appendix 3. The Results of Frequency Analysis of ELPP Lecturer's Self-efficacy Beliefs on Teaching and Assessing 21st-Century Skills

To what extent do you agree with these statements about your TARGET CLASS?		n	%
1.CRITICAL THINKING SKILLS			
a. I have tried to develop students' critical thinking skills.	Not really	0	0,00%
	To a minor extent	12	12,20%
	To a moderate extent	35	35,70%
	To a great extent	28	28,60%
	To a very great extent	23	23,50%
b. Most students have learned critical thinking skills while in my class.	Not really	5	5,10%
	To a minor extent	27	27,60%
	To a moderate extent	34	34,70%
	To a great extent	23	23,50%
	To a very great extent	9	9,20%
c. I have been able to effectively assess students' critical thinking skills.	Not really	10	10,20%
	To a minor extent	22	22,40%
	To a moderate extent	33	33,70%
	To a great extent	27	27,60%
	To a very great extent	6	6,10%
2. COLLABORATION SKILLS			
a. I have tried to develop students' collaboration skills.	Not really	3	3,10%
	To a minor extent	10	10,20%
	To a moderate extent	17	17,30%
	To a great extent	39	39,80%
	To a very great extent	29	29,60%
b. Most students have learned collaboration skills while in my class.	Not really	7	7,10%
	To a minor extent	10	10,20%
	To a moderate extent	28	28,60%
	To a great extent	36	36,70%
	To a very great extent	17	17,30%
c. I have been able to effectively assess students' collaboration skills.	Not really	9	9,20%
	To a minor extent	17	17,30%
	To a moderate extent	28	28,60%
	To a great extent	29	29,60%
	To a very great extent	15	15,30%
3. COMMUNICATION SKILLS			
a. I have tried to develop students' communication skills.	Not really	1	1,00%
	To a minor extent	2	2,00%
	To a moderate extent	22	22,40%
	To a great extent	37	37,80%

To what extent do you agree with these statements about your TARGET CLASS?		n	%
b. Most students have learned communication skills while in my class.	To a very great extent	36	36,70%
	Not really	3	3,10%
	To a minor extent	9	9,20%
	To a moderate extent	27	27,60%
	To a great extent	47	48,00%
c. I have been able to effectively assess students' communication skills.	To a very great extent	12	12,20%
	Not really	2	2,00%
	To a minor extent	13	13,30%
	To a moderate extent	24	24,50%
	To a great extent	36	36,70%
4. CREATIVITY AND INNOVATION SKILLS		23	23,50%
a. I have tried to develop students' creativity and innovation skills.	Not really	3	3,10%
	To a minor extent	11	11,20%
	To a moderate extent	28	28,60%
	To a great extent	35	35,70%
	To a very great extent	21	21,40%
b. Most students have learned creativity and innovation skills while in my class.	Not really	7	7,10%
	To a minor extent	19	19,40%
	To a moderate extent	33	33,70%
	To a great extent	26	26,50%
	To a very great extent	13	13,30%
c. I have been able to effectively assess students' creativity and innovation skills.	Not really	8	8,20%
	To a minor extent	22	22,40%
	To a moderate extent	24	24,50%
	To a great extent	34	34,70%
	To a very great extent	10	10,20%
5. SELF-DIRECTION SKILLS			
a. I have tried to develop students' self-direction skills.	Not really	4	4,10%
	To a minor extent	10	10,20%
	To a moderate extent	35	35,70%
	To a great extent	36	36,70%
	To a very great extent	13	13,30%
b. Most students have learned self-direction skills while in my class.	Not really	6	6,10%
	To a minor extent	25	25,50%
	To a moderate extent	35	35,70%
	To a great extent	25	25,50%
	To a very great extent	7	7,10%
c. I have been able to effectively assess students' self-direction skills	Not really	13	13,30%
	To a minor extent	19	19,40%
	To a moderate extent	32	32,70%

To what extent do you agree with these statements about your TARGET CLASS?		n	%
	To a great extent	28	28,60%
	To a very great extent	6	6,10%
6. GLOBAL CONNECTIONS SKILLS			
a. I have tried to develop students' skills in making global connections.	Not really	6	6,10%
	To a minor extent	23	23,50%
	To a moderate extent	20	20,40%
	To a great extent	32	32,70%
	To a very great extent	17	17,30%
b. Most students have learned to make global connections while in my class.	Not really	8	8,20%
	To a minor extent	27	27,60%
	To a moderate extent	26	26,50%
	To a great extent	25	25,50%
	To a very great extent	12	12,20%
c. I have been able to effectively assess students' skills in making global connections.	Not really	16	16,30%
	To a minor extent	16	16,30%
	To a moderate extent	34	34,70%
	To a great extent	20	20,40%
	To a very great extent	12	12,20%
7. LOCAL CONNECTIONS SKILLS			
a. I have tried to develop students' skills in making local connections.	Not really	11	11,20%
	To a minor extent	23	23,50%
	To a moderate extent	32	32,70%
	To a great extent	25	25,50%
	To a very great extent	7	7,10%
b. Most students have learned to make local connections while in my class.	Not really	17	17,30%
	To a minor extent	25	25,50%
	To a moderate extent	36	36,70%
	To a great extent	16	16,30%
	To a very great extent	4	4,10%
c. I have been able to effectively assess students' skills in making local connections.	Not really	22	22,40%
	To a minor extent	21	21,40%
	To a moderate extent	32	32,70%
	To a great extent	18	18,40%
	To a very great extent	5	5,10%
8. USING TECHNOLOGY AS A TOOL FOR LEARNING			
a. I have tried to develop students' skills in using technology as a tool for learning.	Not really	0	0,00%
	To a minor extent	6	6,10%
	To a moderate extent	22	22,40%
	To a great extent	32	32,70%
	To a very great extent	38	38,80%

To what extent do you agree with these statements about your TARGET CLASS?		n	%
b. Most students have learned to use technology as a tool for learning while in my class.	Not really	0	0,00%
	To a minor extent	10	10,20%
	To a moderate extent	26	26,50%
	To a great extent	31	31,60%
	To a very great extent	31	31,60%
c. I have been able to effectively assess students' skills in using technology for learning.	Not really	5	5,10%
	To a minor extent	14	14,30%
	To a moderate extent	25	25,50%
	To a great extent	27	27,60%
	To a very great extent	27	27,60%



Appendix 4. Etik Kurul Kararı / Research Ethics Committee Approval

Evrak Tarih ve Sayısı: 10.01.2021-5245



T.C
AKDENİZ ÜNİVERSİTESİ REKTÖRLÜĞÜ
Sosyal ve Beşeri Bilimler Bilimsel Araştırma ve Yayın Etiği Kurulu
KURUL KARARI

BEL5Z6JDE

TOPLANTI TARİHİ : 08.01.2021
TOPLANTI SAYISI 01
KARAR SAYISI 20

Üniversitemiz Eğitim Fakültesi Yabancı Diller Eğitimi Bölümü öğretim üyesi **Doç. Dr. Hüseyin KAFES**'in danışmanlığını, **Sinem BİLBEN**'in araştırmacılığını üstlendiği, *"İngilizce Hazırlık Birimi Öğretim Elemanlarının 21. Yüzyıl Becerilerinin Öğretimine Yönelik Sınıf İçi Uygulamaları ve Özyeterlik Algıları"* konulu çalışmanın, fikri hukuki ve telif hakları bakımından metot ve ölçөгüne ilişkin sorumluluğun başvurucuya ait olmak üzere, proje süresince uygulanmasının etik olarak **uygun olduğuna** oy birliği ile karar verilmiştir.

e-imzalıdır
Prof. Dr. Osman ERAVŞAR
Kurul Başkanı

Başkan
Prof. Dr.
Osman ERAVŞAR

Başkan Yrd.
Prof. Dr.
Bahattin ÖZDEMİR

Üye
Prof. Dr.
Hilmi DEMİRKAYA

Üye
Prof. Dr.
Mustafa ŞEKER

Üye
Prof. Dr.
Adnan DÖNMEZ

Üye
Prof. Dr.
Abdullah KARAÇAĞ

Üye
Prof. Dr.
Eyyup YARAŞ

Appendix 5. Katılımcı Onay Formu / Participant Consent Formu

AKDENİZ ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMA VE YAYIN ETİĞİ KURULU



Katılımcı Onay Formu Form No 07

Katılımcı İzin Formu

İngilizce Hazırlık Birimi Öğretim Elemanlarının 21. Yüzyıl Becerilerinin Öğretimine Yönelik Sınıf İçi Uygulamaları ve Özyeterlik Algıları

Sinem BİLBEN

Bu beyan 20.01.2021 tarihinde yapılan kayıtlı anket/mülakat (lar) ile ilgilidir. Akdeniz Üniversitesi ("Üniversite") tarafından yapılan araştırmaya ve diğer değerli düşüncelere katılımım göz önüne alındığında, aşağıdakileri beyan ederim:

Beyan:

- Bu çalışma için katılımcı bilgi sayfasını okuduğumu ve anladığımı onaylıyorum
- Gerekirse soru sorma fırsatım oldu ve bunları tatmin edici bir şekilde cevapladım
- Katılımımın gönüllü olduğunu ve herhangi bir zamanda herhangi bir sebep göstermeden çekilmeyi serbest bıraktığımı anlıyorum
- Geri çekersem verilerim çalışmadan kaldırılacak ve imha edilecek
- Akdeniz Üniversitesi Etik Kurulu'nun bu çalışmayı gözden geçirip onayladığını anlıyorum
- Üniversiteye ve Üniversite tarafından yukarıdaki projenin ve / veya video / filmin ve / veya ses kaydının görüntülerini çekmek ve / veya kaydetmek için izin verdim ("Kayıtlar")
- Üniversiteye, eğitim, araştırma, ticari ve tanıtım amaçlı olarak dünyanın her yerindeki kayıtlarda tüm platformlarda ve tüm medyada (kısmen veya tamamen, yazılı veya başka türlü) Kayıtları yayınlaması için başkalarına yetki verme hakkını ve hakkını veriyorum Üniversitede bu tür kullanımlar arasında, bunlarla sınırlı olmamak üzere, basılı ve çevrimiçi yayın ve yayın bulunabilir.
- Yukarıdaki çalışmaya katılmayı ve kayıt yapmayı kabul ediyorum ve işbu belgeyle, bu proje ve gelecekteki projelerden kaynaklanan tüm işlerde kullanımım için tüm telif haklarını üniversiteye atarım
- Verilerimin Kişisel Verileri Koruma Yasası uyarınca Üniversitede yönetilebileceğini, depolanabileceğini ve arşivlenebileceğini kabul ediyorum.
- Cevaplarımın kesinlikle gizli tutulacağını, tüm kişisel ve hassas verilerimin herhangi bir raporda veya yayında anonimleştirileceğini ve adımın herhangi bir raporda veya yayında tanımlanmayacağını anlıyorum.
- Bu görüşme sırasında hassas kişisel verilerin kaydedilebileceğini anlıyorum. Bu, ırk veya etnik köken, siyasi görüşler, dini inançlar, fiziksel / zihinsel sağlık, sendika üyeliği, cinsel yaşam veya cezai faaliyetlerle ilgili bilgileri içerebilir.
- Araştırmanın **Yabancı Diller Yüksekokulu İngilizce Hazırlık birimi öğretim elemanlarının 21. Yüzyıl becerilerini sınıflarında ne derece öğrettikleri ve bu becerileri öğretmede kendilerini ne derece yetkin bulduklarını saptamak amacı** ile ilgili olarak yazılacağını anlıyorum
- Diğer araştırmacılara ve düzenleyici makamlara gelecekteki ilgili araştırmalarda verilerime erişme izni veriyorum
- Bu çalışma ile ilgili endişelerimin veya şikayetlerimin nasıl dile getirileceğini anlıyorum
- Tazminat düzenlemesi olmadığının farkındayım
- İletişim bilgilerim değişirse araştırmacıyı bilgilendireceğim
- Bu onay formu her bakımdan Türkiye Cumhuriyeti yasalarına ve Türkiye Cumhuriyeti mahkemelerine tabi olacaktır.

İsim, imza ve tarih:

Appendix 6. Permission of Data Collection Tool

29.12.2020

Gmail - Permission Request to use 21st Century Teaching and Learning Survey



SİNEM BİLBEN

Permission Request to use 21st Century Teaching and Learning Survey

3 ileti

SİNEM BİLBEN

15 Kasım 2020 09:14

Alıcı

Dear Dr. Ravitz,

I am a master's student at Akdeniz University, Turkey. For my thesis, I am planning to conduct research named "English as a Foreign Language Teachers' Practices and Self-efficacy Beliefs on Teaching 21st-Century Skills in Classrooms". The study aims to find out to what extent preparatory school EFL teachers teach 21st-century skills in their classes and to what extent they feel successful in teaching those skills.

To measure these aims, I would like to ask your permission to use your survey (Hixson, Ravitz & Whisman, 2012) named "A Survey for Measuring 21st Century Teaching and Learning: West Virginia 21st Century Teaching and Learning Survey[WVDE-CIS-28] ". I ensure you that I will attribute to your study in my thesis.

I kindly inform you that there might be some slight changes in the title of my thesis. I appreciate your contributions to the field a lot.

I am looking forward to your reply.

Kind Regards,
Sinem Bilben

Jason Ravitz

15 Kasım 2020 23:39

Yanıtlama Adresi:

Alıcı: SİNEM BİLBEN

Sinem,

I am very pleased to give you permission to use the survey for your study with changes to your plans as needed. I created a page with more info on this survey, in case you need more information: evaluationbydesign.com/survey21cs

I do hope you will let me know how it goes and share the results, if possible.
Best of luck with your research. ~ Jason Ravitz

[Ayrılan metin gizlendi]

SİNEM BİLBEN

16 Kasım 2020 00:29

Alıcı:

Dear Dr. Ravitz,

Thank you very much for your positive response and the website. All these resources are very valuable to me. I also appreciate your interest in my study and your best wishes. I feel proud and very pleased to use such a reliable and important survey in my study. I am very excited. I hope everything goes well. I will keep you informed of the developments and share the results with you as soon as I complete my thesis.

With gratitude,
Sinem Bilben

15 Kas 2020 Paz, saat 23:39 tarihinde Jason Ravitz

junu yazdı:

[Ayrılan metin gizlendi]

ÖZGEÇMİŞ

Kişisel Bilgiler

Adı Soyadı : Sinem Bilben

Doğum Yeri ve Tarihi :

Eğitim Durumu

Lisans Öğrenimi : Dokuz Eylül Üniversitesi Eğitim Fakültesi

Yabancı Diller Anabilim Dalı

İngilizce Dili Eğitimi Lisans Programı 2013-2018

Yüksek Lisans Öğrenimi :Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü
Yabancı Diller Anabilim Dalı İngiliz Dili Eğitimi Tezli
Yüksek Lisans Programı 2018- 2022

Bildiği Yabancı Diller : İngilizce- Advanced

İspanyolca- Beginner

Bilimsel Faaliyetleri : -

İş Deneyimi

Stajlar : İzmir Atatürk Anadolu Lisesi, 2017

Projeler : Turkish4all Start-up Projesi, 2019 - 2020

Çalıştığı Kurumlar : **Ekim 2019 – Şubat 2020** Antalya Bilim Üniversitesi

Öğretim Görevlisi

Ekim 2020-devam Antalya Bilim Üniversitesi

Öğretim Görevlisi

İletişim

E-Posta Adresi :

Tarih : 24.01.2022

BİLDİRİM

Hazırladığım tezin tamamen kendi çalışmam olduğunu ve her alıntıya kaynak gösterdiğimi taahhüt eder, tezimin kâğıt ve elektronik kopyalarının Akdeniz Üniversitesi Eğitim Bilimleri Enstitüsü arşivlerinde aşağıda belirttiğim koşullarda saklanmasına izin verdiğimi onaylarım:

- ☐ Tezimin/Raporumun tamamı her yerden erişime açılabilir.
- ☐ Tezim/Raporum sadece Akdeniz Üniversitesi yerleşkelerinden erişime açılabilir.

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

21.01.2022

Sinem BİLBEN

İNTİHAL RAPORU

Preparatory class English as a foreign language teachers' practices and self-efficacy beliefs on teaching 21st-century skills in classrooms

ORIGINALITY REPORT

15%

SIMILARITY INDEX

PRIMARY SOURCES

1	scholarworks.harding.edu Internet	215 words — 2%
2	diginole.lib.fsu.edu Internet	124 words — 1%
3	mjltm.org Internet	79 words — 1%
4	www.coursehero.com Internet	75 words — 1%
5	www.researchgate.net Internet	75 words — 1%
6	statcan.gc.ca Internet	69 words — < 1%
7	Murat Cem Acaralp, Nuran Öze. "chapter 24 Investigation of Social Media Sharing Attitudes and Practices of Individuals With Different Mental Structures in COVID-19 Outbreak Process", IGI Global, 2021 Crossref	63 words — < 1%
8	www.polyprep.org Internet	61 words — < 1%