

Exploring EFL Teachers' Perceptions on 21st-Century Skills: A Case Study

Ecem Eker Uka¹ Hasan Bedir²

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Abstract

This study investigated how English language teachers perceived and used 21st – century learning and innovation skills in their classrooms. Data were collected both in qualitative and quantitative methods and an exploratory case study was employed. The convenience sampling method was used and 105 voluntary teachers of English participated in the questionnaire. To support the quantitative data, 10 English language teachers were interviewed and they completed a KWLA chart after attending a seminar regarding the research. Then, following conducting their session, they were expected to create lesson plans that included 21st – century skills and reflection reports. Results demonstrated that the participants in this study are aware of 21st – century skills and their importance in English language learning and teaching. Although they are aware of them, they nevertheless require assistance from their managers and the government. Their understanding of how and when to use these skills needs to be improved, along with their horizons.

Keywords: Professional development, life and career skills, digital literacy skills, 4Cs, 21st – century skills,

¹  Corresponding Author, ecemeker@tarsus.edu.tr, Tarsus University.

²  Author, Faculty of Education, Cukurova University.

Introduction

In terms of education, social sciences, academics, and work-life balance, we are living in a new century that is significantly different from prior centuries. Teaching key courses using conventional teaching methods is insufficient to raise students as productive citizens, workers, and leaders in this era, often known as the 21st – century. Taylor (2009) claimed that the old techniques of teaching and learning need to be abandoned which mostly focus on core subjects' mastery and innovative methodology must include the skills of the new era including critical thinking, creativity, collaboration, and communication (the 4Cs), career and life skills, and digital literacy skills. To understand these skills better, several seminars, conferences, professional development activities and training programs have been conducted and educators, teacher trainers and researchers have been attending these activities. Additionally, to implement the 21st – century skills, a variety of frameworks have been developed. According to a study, the frameworks of 21st – century skills in teaching and learning, provide a guideline for both learners and teachers with a scaffolded approach that helps to construct the understanding of fundamental concepts, while guiding how and when to utilize these abilities (Ambrose, et al., 2010).

Enlightened eclectic teachers of the 21st – century are supposed to provide affordances to the learners, additionally they must understand the significance of integrating the 21st – century innovation and learning skills. Teachers should build a well-constructed education program and teaching context aiming to integrate these skills into core subjects for learners. Since communication has been made easier among individuals worldwide as a mutual language as a result of globalization, especially, for English language learning, the 21st – century learning and innovation skills are crucial for pupils (Wang, 2016). Furthermore, professional development activities should be a guide for teachers since they are fundamental and crucial in terms of guaranteeing quality in students' learning process (Marcelo, 2009). To increase the capacity to use these abilities pedagogically, continuous professional development activities provide teachers to gain a wider perspective about 21st – century skills, thus they will be aware of how to use, when to conduct and in which ways to present them.

To be a part of the global community, teaching and improving 21st – century skills should be the main purposes of educators. According to these general ideas, the current study focused on exploring EFL teachers' perceptions of 21st – century skills and their awareness and the utilization of these skillsets in their education context.

Literature Review

The purpose of pupils' education in the 21st – century is for them to interact with, use, and exploit the language rather than knowing it for its own sake (Eker, 2020). One of instructors' primary objectives should be teaching and improving the target language of their learners in order to provide them a place in a part of the global community and pupils need to be creative, they should exercise analytical thinking. Being creative, communicative, and innovative is essential for students in order to overcome the problems in case of encountering challenges in their real lives and careers (Zivkovic, 2016).

Both learners and teachers, educators, leaders, and administrators must be aware of and knowledgeable about 21st – century skills. Owing to the rapid changes in education and teaching context, the 21st – century skills awareness, usage and importance have been spreading and developing among individuals who are in the learning and teaching context. Therefore, these skills must be recognized especially by teachers and educators, in addition that teachers and educators must follow them closely and be able to successfully utilize them in their educational context (Ilhan, 2004).

In order to become fluent and accurate in English, learners have been developing several skills and they are trying to learn English in different ways. These skills directly specify the quality, facility and proficiency which means an acquisition through training and practice (Dweck, 2000). As Wagner (2008) stated, the 21st – century skills such as problem-solving and critical thinking, effective collaboration and communication skills, creativity and imagination skills, leadership, using initiative, information processing skills, mental agility and adaptation ability should be carried by students.

According to World Bank (2011), the skills are critical for future educational and economic progress, therefore, the 21st – century skills have become essential for the success of learners in the 21st – century since they enable the learners to regulate themselves, adjust and meet the requirements of the 21st – century at the hands of their scaffolders which are the teachers, educators and trainers.

In English as a Foreign Language (EFL) classrooms, practicing and processing of the 4Cs (critical thinking, collaboration, communication and creativity), applying cross-cultural and self-directional skills should be given to the pupils by their teachers (Fandiño, 2013). Teachers are supposed to be the starting point of the change since they are the appliers, decision-makers in education, it is essential for teachers to be cognizant of the 21st – century skills and their implementations in their educational context and the environment (Rusdin, 2018). Hence, teaching requires many commitments and competencies which should be recognized as a challenging and complex activity, a stronger focus on these skills and knowledge of instructor are needed globally. In addition, improving the teacher quality and thereby the quality of teaching can impact student achievement. If teachers understand their role in helping students understand the value of 21st – century skills and successfully integrate these skills into the learning process by focusing on pupils' academic and extracurricular activities, education quality may rise and reach higher levels both locally and globally.

According to these ideas about teachers, it is obvious that continuing professional advancement is a need for instructors which includes the necessities, requirements and qualifications of the 21st – century learning and innovation skills. In 2013, Gibson and Brooks stated that professional development focuses on teachers' needs and interests, gives importance to the 21st – century skills, it increases awareness and implementation of these skills and with the aid of continuous professional progress, instructors can broaden their viewpoints and increase their understanding of the new teaching techniques, forming and shaping their teaching context to reflect 21st – century skills.

The competencies and necessities are being investigated by teachers and researchers in order to fulfill the demands of the 21st – century. Several frameworks have been developed to organize plans and indicate a set of standards to understand these skills and their implementations about what learners and educators are able to do and should know. In 2006, Partnership for 21st – century Skills (P21) was originated, in 2003, En Gauge Framework was prepared in 2010, The Assessment and Teaching of 21st – century Skills Framework (ATC21S) and in 2018, Cambridge Life Competencies framework were formed as current conceptual frameworks for 21st – century skills. Those frameworks are the key elements for educators, teachers and researchers to find out the answers of several questions about the 21st – century innovation and learning skills such as what to conduct, how to implement and when to apply (Eker, 2020).

As a part of the 4Cs, communication a tool to communicate, mostly defined as exchanging knowledge through talking, writing, or using another form of communication. While communicating, people use various ways to convey the message, both verbal and non-verbal, aiming to transfer the message to the receiver. OECD (2009, p.10) defined communication as it follows: “In order to prepare pupils to be not only life-long learners but also active participants in broader communities with a voice and a sense of responsibility for others, communication is crucial.” In teaching context and the environment, it is impossible to think the opposite and that communication is crucial for teachers and language learners and they must be aware of effective communication skills and the usage of these skills properly, which establishes a solid foundation for the usage and implementations of 21st – century skills.

Collaboration is one of the four Cs, and it is commonly understood to mean working with others skillfully and successfully to advance not just the academic and personal lives of instructors, but also the accomplishments and growth of students in their learning setting. Bedir (2019) stated that in order to work skillfully with others in groups, collaboration should be seen as a commitment. In the idea of collaboration, various teams can support to find out different perspectives to reach the target which indicates the importance of group work. Collaboration is seen as a part of communication where members of the group are accountable for their actions, they interact and respect individual's lifestyle,

abilities and ideas, as a conclusion that collaboration increases the efficacy of learning and teaching by contributing to the process.

The word creativity, which is directly related to the word “innovation”, is the capability to analyse and think differently. Among the 4Cs, creativity is one of the important skills and traits of the 21st – century whether it is an innate and acquired skill or it is an ability and aptitude (Piiro, 2011). Creativity should be integrated into the teaching and learning contexts, and it must be provided with the main courses including science, maths and literacy and it can not be separated from other subjects (Robinson, 2011). Creativity in education is always thought of as a cognitive concept and generally, it is referenced to being innovative, imaginative and creative thinking. With the presence of creativity, it is obvious that learning becomes easier and more meaningful since both hemispheres are active during the learning and teaching processes which mean creativity is beneficial not only for learners but also for teachers. As evidence of this idea, Dornyei (2007) stated that there exists a positive correlation in between creativity and academic performance. In the situation of usage of both hemispheres, with the aid of creative abilities, learning becomes more meaningful, compelling, and enjoyable, learners can explore, engage and the language can be emerged by students in every level of teaching and learning processes (Maley & Bolitho, 2015). The importance of creativity has been emphasized for years by many scholars and researchers.

The skill of critical thinking is one of the key components for learners to provoke their schema and mind, in order to improve academically and learn more; additionally, it brings success in their daily lives. Critical thinking is generally seen as a capability to utilize a wide range of skills of cognitive processing including analysing, constructing and creating ideas, evaluating and problem-solving and this situation refers learners to solve unfamiliar problems and think deeply to reach their targets (Kivunja, 2015). In order to acquire critical thinking skills, learners should gain the capacity to employ thought processes, make judgements and choices and resolve issues with the help of reasoning effectively (Yeni, 2018). Therefore, in order to emphasize the importance and improve critical thinking skill, more significant questions needs to be directed, various responses, opinions and perspectives have to be assessed and better solutions, innovative and conventional methods are required in teaching and learning environment (Trilling & Fadel, 2012).

Apart from the 4Cs, there exist some other significant skills and they should be taken into consideration, therefore, importance should be given to these skills which are digital literacy skills and career and life skills. Understanding how to use and give value these abilities may have a significant influence on language learning and teaching procedures. Recently, we have been experiencing the coronavirus pandemic all around the world and this leads teachers, learners and researchers to use digital tools effectively and meaningfully. The ability to know and integrate digital literacy skills into lessons includes creating and evaluating media tools effectively, accessing and transferring the information via digital platforms and technological devices, using and managing the information as well as exchanging the information in education (Yeni, 2018). The coronavirus has prevented instructors from conducting face-to-face lectures and by virtue of those challenges and changes teaching and learning continued online, learners and students have started to learn digital literacy skills naturally and subconsciously without realizing that they are learning but they are in the process (Andersen, 2002).

As well as the skills mentioned above, career and life skills are the supporters and scaffolders for individuals to build opportunities during their life and these skills open a path for both teachers and students to use the 21st – century innovation and learning skills in their academic and personal lives. A teacher of the 21st – century must instruct and prepare learners for their future lives and careers, hence, teachers need to know that they should be flexible according to their students and be aware of the changes in order to adapt themselves (Eker, 2020). Three categories are used to divide life and career skills which are formed as (a) well-developed and effectively managed organizational efforts, (b) effective coordination of organization and information, (c) production development to solve issues and difficulties during any phase of career and life (Jenkins, et al., 2006).

To be able to remain relevant with the 21st – century and worldwide developments, teachers should be aware that they are the beginning point of any transformation and to be able to improve their students' perspectives and skills, they need to know the value of professional development. According to Jackson and Davis (2000), professional development includes a range of informal and formal processes and activities that present suggestions and research for teachers to exploit, engage and encounter teaching and learning outcomes not only inside but also outside the school, aiming to improve teaching, knowledge and skills. To be an effective 21st – century teacher, awareness of the skills and the essential acknowledgement is important to recognize similarities and differences between the actual in-class applications and 21st – century skills' requirements and with the help of professional development, this need can be fulfilled. The following is how Gibson and Brooks (2013) define experiences with continual professional growth:

- Supported by the administration and controlled by educators
- Focused on collaboration, modeling and affordances for feedback and practice
- Connected to active learning
- Delivered in significant ways
- Focused on content and curriculum
- Based on teachers' and students' needs
- Related to more chances for professional development
- Consistent and related to academic objectives
- Intensive and ongoing

By implementing an exploratory case research in a private college in Adana, Turkiye, this study aimed to observe instructors' opinions on 21st – century learning and innovation abilities in light of these broad backdrops and relevant literature review. Additionally, this research focused on increasing awareness of 21st – century skills and supporting teachers' and educators' continuous professional development. With the help of this study, it is aimed to increase teachers' knowledge of these abilities, as well as their awareness and use of them in the classroom. Furthermore, the study's findings would provide experts, educators and instructors with clarity for future research and implications.

These questions were created with the research's objectives in mind:

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

Method

Research Design

In order to investigate EFL instructors' perspectives on 21st – century learning and innovation abilities and to assist them develop their pedagogical applications of the skills through professional development activities at a private college in Adana, Turkiye, this study used an exploratory case study. This research consisted of two phases which were known as qualitative and quantitative data collection ways and a mixed-method research strategy, as Dörnyei (2007b) indicated, yields more

trustworthy data for a study. Furthermore, in order to increase the validity and reliability of the study, a variety of data collection tools were employed.

Data Collection Tools

This study involved a group case study with an in-depth investigation (Zainal, 12007), for that reason a wide range of instruments was used to conduct the study. A questionnaire was used as the initial phase of the study's case analysis to gather qualitative data, and 105 people participated in the questionnaire. Following the completion of the questionnaire, a semi-structured interview with 10 participants who were part of the focus group and who taught English at different levels in the same private institution as the researcher was done. As a follow-up to the interviews, a seminar was organized for the same participants who attended the interviews, the topic of the seminar was "My Recipe... Looking at the 21st – century" which was briefed by a teacher trainer, Elna Coetzer. During and after the seminar, the same 10 participants also known as the focus group were asked to complete a KWLA chart (know, want-to-know, learn, action). As a last step of the study, the researcher asked participants to prepare lecture plans including the 4Cs and the 21st – century learning and innovation skills, additionally, they were supposed to prepare reflection papers about their lecture plans and emphasize the key events which they might experience or face with during their implementations of these lesson plans in their teaching context.

Participants

In order to facilitate easy access for the researcher and to invite all subjects to participate in the study without any specific criteria, 105 English language teachers from various regions of Turkiye were used for the quantitative portion of the study. Both a paper-pen format and an online format were used to collect data from the questionnaire and the open-ended survey (Saunders, Lewis, & Thornhill, 2012).

This sequential mixed methods exploratory case study's qualitative portion involved 10 English language teachers who had been working with students at a private school in Adana, Turkiye. They were chosen as a focus group of the study and their ages are between 24–45. Some of them had their Master's Degree and all of them had different previous teaching experiences. The difference between participant teachers' ages, previous experiences and educational backgrounds contributed to the validity of this study. These people answered the questionnaire and participated in the quantitative portion of the study as well. Then, they were interviewed in accordance with the aim of the study. After the interviews and questionnaire, they participated in a seminar which was organized for this study and completed a KWLA chart before, during and after the interview. As a last step, the participants were asked to prepare lesson plans including the 21st – century skills. After conducting their lessons, they wrote reflection papers about their teaching process with these skills. Since the researcher had taught English at the same school for three years, selecting participants by using convenience sampling made it simpler and easier to get pertinent data for this issue.

Data Collection Procedure

In this research, a five-point Likert scale questionnaire (always true for me, usually true for me, sometimes true for me, usually not true for me, never true for me) was used and the closed type section consisted of forty items, on the other hand, six items were open-ended questions, additionally, participants had the chance to rate how well they used their 21st – century learning and innovation abilities on a table.

The questionnaire was prepared in English for English language teachers and it was developed by Bedir's study (2017) of 21st – century skills. The questionnaire has items which incorporate statements about 21st – century learning and innovation skills and their sub-categories. The researcher created semi-structured interview questions pertaining to the study's goal and its research questions as part of its qualitative component. Prior to the seminar and reflection paper, ten English language teachers were interviewed. The ten interview questions were designed to elicit teachers' perceptions of 21st – century skills, awareness of these skills, and pedagogical implementations of these skills in the classroom.

As a part of the research, the researcher organized a seminar regarding the research and made up a KWLA chart for the same participants who had participated in interviews as the focus group. After conducting the data collection procedure, as the last phase of the research, the participants were requested to make a lesson plan involving 21st – century skills and a reflection paper according to their lesson plans. The purpose of reflection papers was to analyze the challenges, advantages, disadvantages, students’ reactions and teachers’ feelings when they conduct a lesson including the 4Cs.

Stages	Data Collection Tools
Stage I	Questionnaire with 105 participants as case analysis
Stage II	Interviews with 10 participants (Focus Group)
Stage III	Seminar and KWLA Chart with 10 participants (Focus Group)
Stage IV	Lesson plans and Reflection Papers with 10 participants (Focus Group)

Figure 1. Procedure of the Study

Data Analysis

The researcher created semi-structured interview questions pertaining to the study's goal and its research questions as part of its qualitative component. 10 English-speaking people were interviewed. Both qualitative and quantitative methods were used in the data collection and analysis process. The interviews were promptly and verbatim transcribed. The researcher chose emergent coding and employed content analysis to create codes and categories by using ATLAS.ti. Emergent coding creates codes with categories and their subcategories after the texts (Stemler, 2001). By using ATLAS.ti for the qualitative analysis, networks and memos were created and commonly-used words and phrases were selected to create a valid and general answer for the interview questions. The qualitative part of the survey was analysed by following the same technique and the most frequent and similar answers were selected as general responses. Apart from these, the responses of KWLA chart were analysed in three different categories by following Patton’s research (2002) to increase reliability, validity and quality of the study. Field notes and key events were noted during and after the seminar by participants and the data were analyzed in qualitative ways for the overall analytical strategy. As a last step, the reflection papers were categorized and grouped by the researcher and each stage of the lessons was analysed by following a systematic approach in qualitative ways. The researcher asked for details to the participant teachers when it was needed to see the whole picture clearly. To sum up, qualitative data were analysed in appropriate ways which include coding and categorizing in systematically to empower the reliability of this study.

For the questionnaire, descriptive statistics which presents a summary of data with mode, median and mean (Ali & Bashkar, 2016), were used. Teachers’ responses to the questionnaire were entered into Statistical Package for the Social Sciences (SPSS) and negatively worded statements were recorded before calculating the composite scale scores. With the help of SPSS, frequencies, percentages, mean scores and deviations were calculated to analyze data. All in all, using more than two types of data collection tools and a variety of data analysis techniques provide triangulation and this increases the trustworthiness of the research.

Findings

Findings of Quantitative Data

Table 1 displays information from the questionnaire, including some of the questions, and shows how instructors are aware of and using 21st – century learning and innovation abilities.

Table 1.
Descriptive Results of Implementations and Awareness of the 21st – century Skills (with the Main Categories of the Questionnaire)

	Question	Mean	Std. Deviation
Communication and Collaboration	I can articulate thoughts and ideas effectively using oral, written and nonverbal communication skills in a variety of forms and contexts.	4,35	0,82
Creativity and Innovation	I can create new and worthwhile ideas.	4,29	0,85
Critical Thinking and Problem Solving	I can ask questions at all levels of Bloom's Taxonomy of Thinking, but match the purpose with the correct type of question.	3,90	0,99
Reflection and Awareness	I reflect critically on my learning experiences and processes.	4,42	0,75

Except for one item about the ability of critical thinking and problem-solving, most of the items related to 21st – century learning and innovation skills generated mean scores above 4, as shown in the table. The items above a mean score of 4 show a positive inclination and these items belong to communication and collaboration, creativity and innovation and reflection and awareness. However, the critical thinking skill item had the lowest mean score, which was under 4, hence it can be inferred that instructors should concentrate more on honing this talent than the other 4Cs. The questionnaire had 40 items and 39 of them indicated a mean score above 4, which indicates that English language teachers in Turkiye are aware of 21st – century skills and they have been using these skills actively in their teaching contexts. In addition to these 40 questions, the questionnaire included a chart to indicate how much emphasis was being placed on 21st – century skills. (see Table 2).

Table 2.

The Level of Emphasis 21st – century Skills (%)

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

Note. (n=105)

As shown in Table 2, among the 4Cs, communication is mostly used by English language teachers who participated in the questionnaire and this skill is followed by collaboration. It is observable that critical thinking skills have the lowest score on “strong emphasis”, which stands with Table 1. According to this table, critical thinking and creativity and innovation skills should be developed and usage of these skills should be increased in teaching contexts. Table 2 sums up the usage and implementations of the 21st – century learning and innovation skills.

Findings of Qualitative Data

The qualitative data were obtained from the open-ended part of the questionnaire, interviews, KWLA chart, lesson plans and reflection papers with the focus group of the study.

Findings of the Open-Ended Response Part of the Questionnaire

Questions	Responses
<p><i>Do you think these skills are effective in language learning/teaching? Please explain briefly.</i></p>	<p>According to the answers, The majority of the participants agreed that these skills had an impact and were crucial. Their perceptions on 21st – century skills are mostly positive. <i>These are undoubtedly helpful when it comes to English teaching. All of the skills must be taken into account when attempting to teach any subject... (P89)</i></p>
<p><i>Describe a specific activity or strategy you used in your classroom that addresses these skills.</i></p>	<p>Most of the participants have been implementing a variety of activities and strategies to grab students’ attention and achieve their targets. <i>I made the decision one day to let my pupils pick the subject they wanted to talk about in class. They also created some more resources and planned a discussion. I believe this is a solid illustration of the 4C skills taught in the lesson. (P103)</i></p>
<p><i>Describe your confidence in teaching these skills after you completed your teacher preparation program.</i></p>	<p>According to the answers, most of the participants claimed that the level of their working experience and the level of their confidence are interrelated with each other. <i>Well, as time goes on, I feel more comfortable imparting these skills. It has to do with how well you can adapt to your students given the time and experience you have. It always takes time to comprehend and interpret those. (P24)</i></p>
<p><i>What could be the underlying rationale that led to the introduction of these skills into the curriculum?</i></p>	<p>Participants said that a variety of factors, including technology, the pandemic, global changes, globalization, new developments and requirements to be a successful individual in the 21st – century. <i>More emphasis should be placed on preparing students for the future than just academic success in the 21st – century,... In order to prepare students for increasingly complex life and work environments, it is essential to place a strong emphasis on creativity, critical thinking, communication, and collaboration. (P103)</i></p>
<p><i>Please provide us with any additional comments you may have about the 21st learning and innovation skills.</i></p>	<p>This question aimed to find out teachers’ thoughts about 21st – century skills. Most of the participants recommended that in order to develop and integrate these skills and raise awareness towards them, educators need developments in their professional fields. <i>Collaboration, critical thinking, communication, creativity, digital literacy, and problem-solving skills are just a few of the competencies that 21st – century education emphasizes and advocates believe schools should teach in order to prepare both students and teachers for success in the modern world.. (P66)</i></p>

Figure 2. Open-Ended Response Part of the Questionnaire

Findings of Interviews

Interviews were conducted with 10 participants who have been working at the same school as English language teachers and they were audio-recorded. Interviews were transcribed verbatim immediately after conducting them. The interviews aimed to investigate participants' perceptions, ideas and beliefs about being a 21st – century skills teacher, find out their definitions and understanding about these skills and gather information about their level of implementations and classroom practices of these skills. Additionally, the participants answered a set of questions about barriers and the MoNE (Ministry of National Education).

The participants were asked a number of questions about their knowledge and awareness of these skills, and it can be seen from their responses that most of the participants are aware of these skills, especially the 4Cs, but some of them aren't, and they gave different responses when they were asked to identify these skills. Additionally, they claimed that with the help of 21st – century learning and innovation skills, students would become more eager to learn, they would be more active during the teaching and learning process and this situation would be easier for teachers' to garner students' interests, attention and participation.

Among interview questions, one was seeking answers to the meaning of being a 21st – century skills teacher and participants answered this question in similar ways by highlighting the importance of professional development activities, keeping up to date with the changes in the world, professional growth and improvement with the help of administrators and government and being able to integrate and manage these skills with the help of continuous professional development.

A teacher with 21st – century skills can come up with unusual ways to capture students' attention, use their minds to be more creative, and get them interested in the lessons. A teacher of 21st – century skills should constantly provide opportunities for professional growth in order to keep up with societal changes. (Respondent 10)

In the interview, there were two questions about promoting 21st – century skills and using them in educational settings with the support of the Ministry of National Education (MoNE). The participants asserted that even though MoNE is aware of these skills, the support and training provided for instructors and students are insufficient. Most of the participants indicated that they need to be supported by the government, administrators and MoNE in order to improve these skills and implement them effectively in their teaching context. Seminars, training programs, professional development activities and conferences can be organized for teachers and learners to develop awareness and conduct these skills in daily and academic lives.

The researcher asked some questions about the implementations and usage of these skills such as sample activities that they and their school implement, classroom practices to increase usage of these skills and possible barriers and limitations that prevent teachers from conducting and integrating them in their teaching environment. The majority of participants said that they focused their lessons on communicative and collaborative tasks, in addition that they were using technological tools actively and effectively in order to grab students' attention since they were surrounded with the latest technological tools as they are the new generation.

The researcher's final question to the interviewees focused on the obstacles and constraints that prevent the application and use of 21st – century skills. Their answers were similar which were about lack of support from the government and MoNE, students' background and readiness to change, course books, technological tools, and gadgets were insufficient, and teachers' knowledge, awareness, and application of these skills were lacking.

Findings Obtained with the KWLA Chart

Among qualitative data collection instruments of the study, the researcher developed a KWLA for the participants which were the focus group of the study and a seminar was organized for this study by the researcher. The seminar's theme was "My Recipe... Looking at the 21st – century," and it was delivered by teacher trainer and educator Elna Coetzer. The participant replies are shown in Table 3 for each column.

Table 3.
Responses of the KWLA Chart

What I Know	What I Want to Learn	What I Have Learned	What Action I Will Take
21st – century skills help learning and teaching effectively, prepare students for their future careers.	I wish to discover how to combine those skills into a lesson and I want to learn how to prepare my learners for the future.	I've mastered incorporating these abilities into my lessons and be open to changes. I have learned how to help my learners to use these skills.	I'll include these activities and skills in my lesson plans and help my learners by showing them the usage of these skills.
I know about the 4Cs.	I want to learn how to develop professionally.	I have learned about new techniques, methods and activities to use.	I will continue developing professionally and broaden my horizons.

Results of Instructors' Reflection Papers about Their Lessons

The participants were required to create a lesson plan that included the 4Cs as the final step of the current study and to critically reflect on their lessons. The aim of the researcher is not only to support the qualitative data but also to investigate the challenges, difficulties, strengths, weaknesses, advantages and disadvantages that the teachers encountered during their lessons. Additionally, these reflection papers and lesson plans helped the researcher to visualize the flow of the lesson and they were used to find out students' behaviors, reactions and attitudes towards the lesson. Some of the participants' responses are as follows:

My students were thrilled to work together to finish the job after I taught a lesson that included the 4Cs. They did this by using their critical thinking and problem-solving abilities to evaluate and organize the activity's components. They all employed the 4Cs in an integrated manner when I separated them into groups and asked them to develop their own scenarios using the target language, and their happiness with the class was evident right away. I recognize the value of using these talents once more as a teacher in the twenty-first century. (Teacher 1)

Regarding the students' opinions, it should be noted that they considered this exercise to be both quite helpful and fascinating. When students needed to make decisions as a team or group, they discovered a new method of learning that involved using their own resources and fresh guidelines on how to accomplish newly formed objectives and desires. (Teacher 9)

As presented above, the findings are consistent with one another, and information acquired using both qualitative and quantitative approaches was connected. The study's conclusions indicate that although instructors are aware of the 21st – century learning and innovation skills, they still require assistance and training to become proficient in these abilities and implement them effectively. Furthermore, professional development activities are required for teachers and MoNE should support teachers and educators in terms of this issue.

Discussion, Conclusion, and Suggestions

The study sought to investigate English language teachers' perceptions on 21st – century learning and innovation skills and their pedagogical implementations. Furthermore, with the help of this study, English language teachers' awareness about these skills was explored.

According to the findings of the study, the participating teachers indicated that they are aware of these skills and they have knowledge of them. They strongly claimed that these skills are as important as the mastery of core subjects for their learners' academic and professional lives. Teachers have highlighted that they are supposed to provide and integrate these skills in their teaching context, for this purpose

they need to be trained and supported by administrators and the Ministry of National Education (MoNE). Erdoğan (2019) stated that in order to succeed in academic and work lives, 21st – century skills are fundamental essentials, therefore teachers need to prepare learners for their future with these skills. She also indicated that unless these skills are provided to the students, they graduate without the knowledge of them and as a result of this situation they will have problems in society and work.

Although teachers emphasized that they have the knowledge and awareness of 21st – century skills, they also admitted the lack of experience and training to develop and implement these skills effectively in their teaching context. Professional development is crucial especially in this era, it is a key process for teachers in order to engage inside and outside of their teaching context, it should be continuous, ongoing and it should open a path for teachers to improve their knowledge, awareness and practices of these skills (Jackson & Davis, 2000).

As it is observed in the results, conducting a seminar with a KWLA chart and preparing a lesson plan including reflection papers are some activities of professional development. Therefore, this research was designed as an exploratory case study which is accepted as a direct interference for teachers and educators in order to improve their professional growth and development (Hensen, 1996). With the help of this study and the seminar, participating teachers claimed that they became more enlightened and experienced in terms of integrating and implementing the 21st – century learning and innovation skills. Additionally, they admitted that they feel more comfortable and confident since they know how, when and in what ways to apply these skills and how to prepare their students for their future. Orak (2019) concluded in her study that participating teachers were highly motivated to provide these skills and develop them in their teaching contexts.

The participants in the research have emphasized that they were aware of the 21st – century skills, however, they need to be supported and trained professionally by MoNE, the government and their administrators. Teachers emphasized that “inadequate curricular standards and a rigid culture of test-based evaluation” (Bedir, 2017) prevent them from developing and implementing these skills even though they have an interest and desire to use them effectively. As a result of this situation, it is observed that the importance of professional development should be addressed and adaptations should be established since they are the requirements of this new era (Guoyuan et al., 2018). According to Happ (2013), the 21st – century learning and innovation skills are needed to be promoted by teachers and placed in the curricula in order to develop competent individuals in this global world.

The current study focused to find out English language teachers’ perceptions on 21st – century skills and their pedagogical implementations in their teaching contexts, in Türkiye. Additionally, this study aimed to contribute to the literature in the field of English language teaching in the 21st – century.

The 21st – century learning and innovation skills, communication, collaboration, creativity, critical thinking (the 4Cs), digital literacy skills and life and career skills are essential for learners and teachers both in their academic and work lives, in order to be effective leaders, individuals and citizens, therefore, these skills should be placed in the curriculum and the syllabus and the MoNE (Ministry of National Education) should support teachers and students in terms of this topic.

Professional development sessions and training programs are required in order to develop and encourage enlightened eclectic in-service and pre-service teachers of the 21st – century, with this way it is possible to develop well-qualified individuals for the future and improve teachers’ practices, awareness, knowledge and beliefs of the 21st – century skills. The results of this study have revealed that teachers are open to change and they are willing to adapt themselves to the requirements of the 21st – century skills, for this reason they need to be guided by the administrators and the MoNE for professional development. It is obvious that teachers’ awareness and implementations of the 21st – century skills and professional development activities are closely interrelated.

This study has some suggestions for this field in terms of exploring and investigating the perceptions of learners about 21st – century learning and innovation skills and their points of view about their teachers’ implementations of them. As this current study was designed as a mixed-method exploratory case study, the same situation of this context might be analysed deeply within various and different

research designs. Apart from these, the number of participants was limited for the qualitative part of this study which may lead to different results in a wider context.

Additional studies might focus more on the effects of professional development sessions in order to improve teachers' awareness, knowledge and implementations of the 21st – century learning and innovation skills. Furthermore, various and different data collection tools can be used when conducting future research.

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Ethic statement: In this study, we declare that the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" are complied with and that we do not take any of the actions based on "Actions Against Scientific Research and Publication Ethics". At the same time, we declare that there is no conflict of interest between the authors, that all authors contribute to the study and that all the responsibility belongs to the article authors in case of all ethical violations.

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