

Integration of Technology in EFL Classrooms: Turkish Teachers' Perceptions and Proficiency Levels

Mohammadreza Valizadeh¹

Recommended citation: Valizadeh, M. (2021). Integration of technology in EFL classrooms: Turkish teachers' perceptions and proficiency levels. *Turkish Online Journal of English Language Teaching (TOJELT), 6*(2), 106-124.

Received: Abstract 30 Oct. 2020 The present study aimed at investigating the Turkish teachers of English as a Foreign Accepted: Language (EFL)'s level of proficiency in using technology, perceptions about 22 Jan. 2021 integration of technology, and implementation of technology in online classes in Turkey during the Covid-19 Pandemic. This research utilized a mixed-methods design. The data were gathered from 159 EFL teachers in Turkey via a questionnaire, including both open-ended questions and close-ended items on Likert-scale format. The quantitative data were analyzed by calculating frequency and percentages and the open-ended questions were analyzed thematically. Turkish EFL teachers generally had positive perceptions and views about technology. The majority of the teachers stated that they can use technology as an instructional aid and have integrated technology into their online class syllabuses to improve the students' understanding and promote student engagement in higher-order thinking skills. However, over two-thirds of the participants stated that they think they need more training in the use of technology for teaching, yet those who were proficient mentioned various useful PC software, cell phone applications, and websites, such

¹ Cappadocia University, <u>mrvalizadeh2015@gmail.com</u>, <u>https://orcid.org/0000-0002-4312-9731</u> 106

as PowerPoint, Canva, Prezi, Mentimeter, Microsoft Teams, Google Form, Youtube Videos, Smart Boards activities, MindMeister, Wordwall, Classtools, Kahoot, Biteable, coursebooks iTools, Quizizz, Quizlet, Pinterest, Quizshow, Padlet, iSLCollective, Baamboozle, Master Voc, Wizer.me, Liveworksheets, Book Creator, Toontastic 3D, Screencast-O-Matic, FlexClip. This research has been done in the context of Turkey; however, EFL teachers, policy makers, and institutions worldwide can benefit from the results of the study to enhance their online education system.

Keywords: integration of technology; EFL teachers; perceptions; level of proficiency; online classrooms.

Introduction

In recent years, the rapid advancement of technology has provided educators with opportunities to utilize technology for education (Shadiev & Yang, 2020). Literature has shown that the integration of technology in language classrooms can develop learners' language skills and enhance their attitudes towards language learning (Ahmadi, 2018; Ghanizadeh, Razavi, & Jahedizadeh, 2015; Golonka, Bowles, Frank, Richardson, & Freynik, 2014; Grgurović, Chapelle, & Shelley, 2013; İstifçi et al., 2018; Shadiev & Yang, 2020). Utilizing technology can create more pleasant and motivating learning environments for language learners (Ghanizadeh et al., 2015; Ilter, 2009, 2015). Consequently, utilizing various technologies has become common for language learning (Ahmadi, 2018; Shadiev & Yang, 2020) and technology-integrated language education can be an essential issue in the future of language education for both language teachers and learners (Cebi, 2018). However, some language teachers do not integrate technology into their classrooms; nor do they use it as a supplementary tool (Alghasab, Alfadley, & Aladwani, 2020; Merç, 2015) even though they generally have positive attitudes towards it (Aydin, 2013; Cebi, 2018; Saglain & Mahmood, 2013). The effective use of technology in the teaching and learning process has been of great concern to many educational systems (Njiku, Maniraho, & Mutarutinya, 2019). In fact, the technology per se is not effective; rather, teachers' particular uses of technology affect language learning (Kern, 2006). Consequently, several studies have investigated various factors influencing the implementation of new technologies in classrooms (Almalki, 2020). They have found that teachers' technological knowledge and skills (Al-Awidi & Aldhafeeri, 2017; Albirini, 2006;

Alghasab et al., 2020; Almalki, 2020; Aydin, 2013; Cebi, 2018; Gilakjani, Sabouri, & Zabihniaemran, 2015; Saqlain & Mahmood, 2013), their teaching experience (Lam, 2000), teachers' attitudes towards technology and their experiences (Albirini, 2006; Lam, 2000; Li & Walsh, 2011), and their access to appropriate resources and software (Cebi, 2018; Gilakjani et al., 2015; Li & Walsh, 2011) are the main teacher-related factors affecting the successful integration of technology. Moreover, professional teacher training and development programs (Afshari, Bakar, Luan, Samah, & Fooi, 2009; Alghasab et al., 2020; Chaaban & Ellili-cherif, 2017; Gilakjani et al., 2015; Li & Walsh, 2011), institutional support (Spiteri & Rundgren, 2020), time constraints, technological infrastructure, (Al-Awidi & Aldhafeeri, 2017; Alghasab et al., 2020; Gilakjani et al., 2015) as well as technological training and support, (Al-Awidi & Aldhafeeri, 2017; Aydin, 2013; Cebi, 2018; Chaaban & Ellili-cherif, 2017; Gilakjani et al., 2015; Merç, 2015) are all essential factors contributing to the successful implementation of technology. In Turkey, Merc (2015) explored the pre-service English as a Foreign Language (EFL) teachers' use of technology in their classrooms during their teaching practice experience. He found that they were not benefiting from the available technology at a satisfying level because of insufficient training, lack of basic facilities, and their own choices. In terms of Turkish in-service teachers' perceptions of computer use for teaching EFL, Aydin (2013) investigated 157 Turkish EFL teachers' knowledge of software, their attitudes towards, and their reasons for using personal computers. He also explored the perceptions of selfconfidence in integrating computers. The issues of school climate and support with respect to the use of computers for teaching EFL were also examined. The findings showed that Turkish EFL teachers had little knowledge about certain software and experienced difficulties using the applications and that they suffered from a lack of technical and instructional support, although they had positive attitudes towards computer integration and computer use. Since Aydin (2013) examined this issue, seven years have passed; thus, some changes might have occurred. Moreover, because of the requirement of social distancing under Covid-19 pandemic, many universities worldwide adopted emergency online teaching, as the alternative to the face-to-face education (Bailey & Lee, 2020; Hodges, Moore, Lockee, Trust, & Bond, 2020; Khatoony & Nezhadmehr, 2020; Zhang, 2020) in response to university closures in the time of crisis. Likewise, in Turkey, there was a sudden shift from the traditional face-to-face education model to the online one.

Although a few Turkish universities were already utilizing distance online education, it was not widespread in Turkish higher education. The pandemic forced Turkish universities to improve their technical infrastructure and teach learners online so as not to interrupt their academic studies (Erkut, 2020; Gunes, 2020). Technology integration has been essential during the period of coronavirus pandemic to help teachers worldwide to connect with learners and proceed with the teaching and learning process (Gao & Zhang, 2020; Hanna, Barr, Hou, & McGill, 2020; Khatoony & Nezhadmehr, 2020); therefore, instructors had to adapt to the challenges of online instruction (Dhawan, 2020). Literature has shown that teachers had various perceptions of online EFL instruction during the Corona virus pandemic as they compared it with face-to-face language teaching (Gao & Zhang, 2020). Chinese EFL university teachers in Gao and Zhang's (2020) research had clear cognitions about features, advantages, and limitations of online instruction and that they got knowledge of information and communication technology (ICT) by understanding learners' learning needs, online teaching practice, and the necessity of integrating some traditional classroom teaching methods into online instruction. Iranian EFL teachers in Khatoony and Nezhadmehr's (2020) study were able to implement and utilize the online applications and platforms efficiently; they also had positive attitudes towards the integration of technology in Iran due to the necessities of social distancing; however, they acknowledged the existence of several challenges including "lack of appropriate materials, learners' lack of attention and demotivation towards online classes, lack of funding and support for language institutions" (p. 89). In the UK, Modern Foreign Languages (MFL) teachers in Hanna et al.'s (2020) study were interested and regular users of UK based Facebook groups, but acknowledged "a gap in practice from the expectation of CALL in the MFL classroom" (p. 59). Implementation of technology, itself, can cause some challenges to teachers and learners (Bailey & Lee, 2020; Khatoony & Nezhadmehr, 2020). Furthermore, the extent to which instructors have successfully overcome these challenges and which factors are most related are still unknown (König, Jäger-Biela, & Glutsch, 2020). Additionally, investigating teachers' beliefs are necessary for their professional development, particularly during the Corona virus pandemic (Zhang, 2020). Consequently, this study explored Turkish EFL teachers' perceptions, level of technological proficiency, as well as implementation

of technology in the process of online teaching in Turkey during Coronavirus pandemic condition. Therefore, this study addressed the following questions:

- 1. What is the Turkish EFL online teachers' level of technology proficiency?
- 2. What are the Turkish EFL online teachers' perceptions and views of technology?
- 3. How do the Turkish EFL online teachers implement technology in their online classes?

Method

Participants

The participants were 159 Turkish EFL teachers who experienced the online education during the Covid-19 pandemic. Table 1 provides a summary of participants' background characteristics.

Table 1

Participants' Background Characteristics

		107	
		107	67.3
		52	32.7
Mean	32.22		
SD	8.155		
Mean	8.70		
SD	7.121		
	Mean SD Mean SD	Mean 32.22 SD 8.155 Mean 8.70 SD 7.121	52 Mean 32.22 SD 8.155 Mean 8.70 SD 7.121

Instruments

Data were gathered by means of a questionnaire, which was designed to collect both qualitative and quantitative data. The questionnaire incorporated the adapted items which had already been developed by Almalki (2020). The author of the present study carefully thought about the original items of the questionnaire to improve them in terms of wording and clarity. Moreover, in order to pursue the whole aims of the research, three open-ended questions were added to the original questionnaire. Therefore, quantitative data were obtained via close-ended questions with response on Likert-scale format. Qualitative data were acquired through open-ended questions.

The questionnaire included four sections. The 1st section provided biodata about the participants' gender, age, and years of teaching experience. The 2nd section incorporated seven close-ended items on Likert scale investigating the EFL teachers' perceptions and views of technology. The 3rd section, including six close-ended items and one open-ended question, explored the teachers' level of technology proficiency. The 4th section, incorporating seven close-ended and two open-ended questions, investigated the teachers' implementation of technology in class. The participants needed to read the close-ended statements and select one of the options of 'Strongly Disagree', 'Disagree', 'Not sure', 'Agree', and 'Strongly Agree'.

Data Collection Procedure

Before the study was carried out, the questionnaire was piloted with a similar group of ten teachers. Reliability of the questionnaire, estimated via Cronbach Alpha, was .841, indicating a good level of internal consistency (Pallant, 2013).

The questionnaire was distributed to 211 EFL teachers of online education, teaching in Turkey. The participation of them was voluntary and solicited via online Google Form. They were informed that by completing and returning the questionnaire, they had consented to participate in the study. They responded to the questionnaire anonymously. Out of 211 teachers, 159 teachers completed and submitted the questionnaire.

Data Analysis

The quantitative data were analyzed by calculating frequency and percentages and the openended questions were analyzed thematically.

Result and Discussion

Level of Technology Proficiency

Table 2

Teachers' Level of Technology Proficiency

Strongly	Disagree	Not Sure	Agree	Strongly
Disagree				Agree

Valizadeh (2021)

	Frequenc y	%								
I can apply what I know about technology in the classroom.	2	1.3	10	6.3	15	9.4	89	56.0	43	27.0
I am able to use technology as an instructional aid and have integrated technology into the syllabus.	2	1.3	8	5.0	22	13.8	89	56.0	38	23.9
I can use many different computer applications.	2	1.3	16	10.1	33	20.8	69	43.4	39	24.5
I am proficient in using a wide variety of computer technologies.	3	1.9	19	11.9	57	35.8	45	28.3	35	22.0
I think that I need more training in the use of technology for teaching.	7	4.4	18	11.3	23	14.5	88	55.3	23	14.5
It is hard for me to implement technology in class.	20	12.6	70	44.0	48	30.2	16	10.1	5	3.1

As Table 2 shows, the majority of the teachers (83.0%) claimed that they can apply what they know about technology in the classroom. A large number of them (79.9%) stated that they are able to use technology as an instructional aid and have integrated technology into their class syllabus. Two-thirds of the participating teachers (67.9%) claimed that they can use many different computer applications, but 20.8% of the rest mentioned they were not sure about it. Similarly, half of the teachers (50.0%) claimed that they are proficient in using a wide variety of computer technologies while over a third of the rest (35.8%) were not sure about it. Over half of the respondents (56.6%) said that it is not hard for them to implement technology in class, whereas

about a third of the rest (30.2%) were not sure about it. Finally, over two-thirds of the participants (69.8%) stated that they think that they need more training in the use of technology for teaching, yet very few of the rest (15.7%) did not think so.

As for the answers to the open-ended question, the teachers explained what applications, technological devices, or websites they utilize in their classes. Their responses to open-ended question supported the percentages found through the close-ended items. The teachers mentioned various PC software, cell phone applications, and websites. They enumerated PowerPoint, Canva, Prezi, Mentimeter, Microsoft Teams, Google Form, Youtube Videos, Smart Boards activities, MindMeister, Wordwall, Classtools, Kahoot, Biteable, coursebooks iTools, Quizizz, Quizlet, Pinterest, Quizshow, Padlet, iSLCollective, Baamboozle, Master Voc, Wizer.me, Liveworksheets, Book Creator, Toontastic 3D, Screencast-O-Matic, FlexClip. Some of the mentioned tools, such as Google Meets, Office software (Word, PPT, etc.), Audio/Video recordings, and Online learning tools (e.g, Kahoot, Quizlet) were also mentioned by teachers in Denmark in Zhang's (2020) study for teaching Chinese language. Additionally, the Turkish EFL teachers, have much better access to various technological tools in comparison to the Iranian instructors in Khatoony and Nezhadmehr's (2020) study. The followings are some of the Turkish EFL teachers' explanations. P represents the word participant and the number which follows represents the number of the participant in the list of the respondents to the open-ended question in the questionnaire.

P. 4: "I use free templates in Canva to create graphics and presentations."

P. 10: "I use live polls and quizzes on Mentimeter to create interactive presentations, meetings, and quizzes."

P. 27: "Using Microsoft Teams I set up specific teams for classes, so my students can learn in groups. I've also subscribed, so I can easily provide feedback, and grade my students' assignments. It is also possible to assign quizzes to students through integration with Office Forms."

P.35: "I use templates in Wordwall to create interactive activities. By sharing my screen, my students and I can play the website games, quizzes, and all the Interactives."

P.41: "I really like Classtools website because I can create free games, quizzes, activities. I also use this website when I want to create groups in my classes and I need to randomly select group partners."

P. 48: "Kahoot is my favourite because it's a game-based learning platform. I also use it to assess my students' understanding in class or I provide short quizzes to review the lessons."

P.53: "Because I believe videos can help students learn languages, I sometimes make video presentations using Biteable or FlexClip. Also, I think Screencast-O-Matic is a useful tool for screencasting and video editing. I also sometimes use it. I also recommend my students to use it to prepare some of the assignments. For my classes with children, to teach or review new vocabulary or grammar, I usually use Toontastic 3D to draw, animate, and narrate my own cartoons."

P.67: "To check what my students know about the taught lessons, I prefer to use Quizizz. It can be used even in group works. The teaching and learning method will be in a quiz-style. Each student answers questions independently, and contends with other students on the same quiz, which I really like."

P.79: "I use Quizlet because I can provide my students with various learning tools, such as flashcards, games, and tests for various topics."

P.84: "I always download different worksheets from Pinterest. It has worksheets about different language skills and components suitable for different levels of proficiency."

P.98: "I'm in favour of iSLCollective because it is full of worksheets, video lessons, PowerPoint files, etc. it makes my work easy."

P.111: "I use learning games in Baamboozle."

P.123: "I've been using MasterVoc for several years. It is an excellent platform for learning and teaching English. It helps English learners develop their skills for both General English and imporant exams, such as TOEFL and IELTS."

P.133: "I make interactive engaging worksheets using Wizer.me and Liveworksheets.com. My students do the worksheets online and send them to me."

114

P.147: "Coursebook iTools are an integral part of my teaching. Now with the online teaching, I do the teaching with teams and I share word documents to give writing feedback. I use Kahoot, Quizizz to play games and Quizlet for vocabulary."

P.151: "In private schools, lessons are taught on the Smart Board. Due to the pandemic, many distance education platforms, such as zoom are used."

P.158: "Interactive whiteboard, extra sources in EBA- Eğitim Bilgi Ağı- (Turkey's Education Information Network, or EBA in short). By interactive books, we work on word contests and games in books (maraton, hız publications etc.)"

Perceptions and Views of Technology

Table 3

Teachers' Perceptions and Views of Technology

	Strongly		Disagree Not Sure		Sure	e Agree			Strongly		
	Disag	Disagree						-		Agree	
	Frequenc y	%	Frequenc y	%	Frequenc y	%	Frequenc y	%	Frequenc y	%	
The use of technology eases the pressure on me as a teacher.	7	4.4	11	6.9	20	12.6	76	47.8	45	28.3	
Technology plays an important role in the learning process.	4	2.5	4	2.5	5	3.1	71	44.7	75	47.2	
Technology is a valuable instructional tool.	2	1.3	3	1.9	10	6.3	91	57.2	53	33.3	
The use of technology improves students' understanding of the lesson.	4	2.5	13	8.2	23	14.5	73	45.9	46	28.9	
Technology motivates students	7	4.4	5	3.1	37	23.3	64	40.3	46	28.9	

to get more involved in the										
learning process.										
The use of	4	2.5	10	6.3	34	21.4	73	45.9	38	23.9
technology results										
in students										
neglecting										
important										
traditional learning										
resources (e.g.										
library books).										
Technology	7	4.4	46	28.9	41	25.8	48	30.2	17	10.7
requires software-										
skills training,										
which is too time-										
consuming.										

Based on Table 3, Turkish EFL teachers generally have positive perceptions and views about technology. A large number of them (76.1%) stated that the use of technology eases the pressure on them as teachers and only 11.3% of the rest did not have such feeling. The majority of the teachers (91.9%) believed that technology plays an important role in the learning process and about the same number (90.5%) believed that technology is a valuable instructional tool. A large number of the participants (74.8%) stated that the use of technology improves students' understanding of the lesson while very few respondents (10.7%) did not believe so. Over a third of the teachers (69.2%) believed that technology motivates students to get more involved in the learning process, yet very few respondents (7.5%) disagreed. On the other hand, about the same number of the participating teachers (69.8%) argued that the use of technology results in students neglecting important traditional learning resources (e.g. library books) while very few of the rest (8.8%) did not believe so. Blow half of the participants (40.9%) thought that technology requires software-skills training, which is too time-consuming and a third of the rest (33.3%) did not think so.

Teachers' Implementation of Technology in Class

Table 4

116

	Strongly Disagree		Disagree		Not Sure		Agree		Strongly Agree	
	Frequenc	%	Frequenc y	%	Frequenc y	%	Frequenc y	%	Frequenc	%
I integrate computer technologies in my teaching activities.	1	.6	9	5.7	32	20.1	86	54.1	31	19.5
I try to use as much computer applications as I can.	1	.6	12	7.5	34	21.4	89	56.0	23	14.5
I use new technologies in class.	3	1.9	14	8.8	40	25.2	79	49.7	23	14.5
Technology is a fundamental component of my class.	2	1.3	9	5.7	37	23.3	83	52.2	28	17.6
I introduce my students to new technologies.	0	0	21	13.2	42	26.4	73	45.9	23	14.5
I integrate technology to improve the students' understanding.	1	.6	8	5.0	19	11.9	104	65.4	27	17.0
I plan and integrate technology-based learning activities that promote student engagement in higher-order thinking skills.	3	1.9	8	5.0	80	50.3	50	31.4	18	11.3

Teachers' Implementation of Technology in Class

As Table 4 indicates, a large number of EFL teachers in Turkey (73.6%) claimed that they integrate computer technologies in their teaching activities and only 6.3% said they do not do it. About the same number (70.5%) stated that they try to use as much computer applications as they can while only 8.1% said the opposite. Nearly two-thirds of the respondents (64.2%) said they use new technologies in class whereas 10.7% of the rest stated they do not do it. Over two-thirds of the participants (69.8%) mentioned that technology is a fundamental component of their classes and only 7.0% of the rest did not believe so. Over half of the teachers (60.4%) stated that they introduce their students to new technologies. The majority of the respondents (82.4%) said they integrate technology to improve the students' understanding and very few of the rest (5.6%) did not do it. However, below half of the participating teachers (42.7%) stated they plan and integrate technology-based learning activities that promote student engagement in higher-order thinking skills, but half of the rest (50.3%) were not sure about it.

Regarding the answers to the open-ended questions, the teachers were asked to explain how they implemented technology in their classes and what they did to integrate technology in their online classes in addition to the online platforms they utilized during the pandemic. Their responses showed that they integrate various computer technologies in their teaching activities. The following are some of the excerpts from what they explained.

P.3: "During the pandemic we use Zoom and run our classes online, but in addition, I use YouTube or online games for improving grammar and vocabularies."

P.14: "Regardless of the pandemic, I have been working with young learners for 2 years and the use of technology in the class has had a significant role in the teaching process. When I use it effectively, children are involved in lesson. They look and listen curiously. I use Kahoot. Via sharing my screen, I also use websites that have some songs, videos, and games."

P.29: "Technology is useful to attract students' attention. Students also do not get bored when I use different applications, but honestly, during the corona virus lockdown, I had to learn about more applications, and I use vocaroo, quizzlet, kahoot, mentimetet, padlet, and zoom rooms for group discussion in online education."

P.32: "I use lots of applications and funny stuff. Games sites are really helpful for me because my students are on 3rd grade and they like to enjoy while learning. We sing songs, play online games, do some interactive worksheets, watch short movies (about 4-5 minutes) etc. Besides, I prepare PowerPoint about the subject. While I am preparing it, I use lots of images, visual contents. Briefly, I try to be amusing. It really works."

P.44: "I have been using lots of applications for my students. I record some videos and create my lessons on my own. Also, I read books, sing songs and then, add them into my presentations. I use free templates in Canva to create graphics and presentations. My students love it!"

P.51: "I think I provide students with faster access to information with Office Programs, screen reflections and screen sharing. In addition, with drive systems, it is easier to deliver homework / projects and to share data with students."

P.63: "Using smart boards, our level of benefiting from technology has increased and become easier. We can easily access many activities that are compatible with the smart board. We can carry out these activities interactively with children, and we can include children in the activities. We can produce new activities ourselves, which can be applied interactively with children via the smart board. We can share every application on the internet with children, and we can make these applications visually, audibly and interactively."

P.75: "During pandemic, I've used Cambridge Smart board applications. I've prepared PowerPoint presentations and using Zoom, I share my screen with students. About self-studying or homework applications, my students and I use Cambridge LMS system for improving their knowledge."

P.88: "I use Kahoot in teaching words! And the students participate with great pleasure and find it funny. On Toontastic, I create interesting stories. I add words and structures needed to be learned."

P.92: "Apart from the program I use during distance education period, I like integrating different platforms like Google classroom or teams to create an interactive learning environment.

119

In addition, some of the websites like Baamboozle or Kahoot are also helful to play games related to the subject matter."

P.107: "In addition to Webex and Zoom, video creating and editing programs such as Screencast-o-Matic and FlexClip are really useful. I also use collaborative teaching platforms such as Padlet and Google Forms."

P.126: "I show them videos according to our topic. We play online games. We listen and sing songs, draw, take quiz together. We are all having fun! That is why they are crazy about my lessons. I use lots of applications like online storybooks. Students like creativity and variation. I give them different topics for presentations. They have learned how to make an online presentation."

Based on some teachers' responses, thankfully, Turkey's Education Information Network was able to provide good opportunities for Turkish EFL teachers to benefit from Smart Boards.

P.139: "There are smart boards in our schools within the scope of Fatih project. We load and use course materials with external disks. We also use content from the EBA platform- EBA: Eğitim Bilgi Ağı- (Turkey's Education Information Network, or EBA in short) on the internet."

P. 144: "With the smart board project of MEB (ministry of national education), we have acquired all the technological possibilities. Our access to technology and our inclusion in the course is just a click away. Our smart board activities are especially useful for listening and speaking activities of the textbooks. You can stop it and include the student in the listening process as well as in speaking activities."

"Using an online tool does not guarantee meaningful interactions that can induce higherorder thinking skills and ultimately lead to learning." (Lee, 2014, p. 41). Thus, various factors affecting the effectiveness and success of online collaborative learning must be considered. Literature has indicated pedagogical strategies, teacher roles, the technological instruments, the nature of the tasks and group interaction processes (Arbaugh, 2007; Archibald, 2010; Daradoumis, Martínez-Monés, & Xhafa, 2006). As a result, the last open-ended question in the current study asked teachers how they plan and integrate technology-based learning activities that promote student engagement in higher-order thinking skills. The following are some of their answers. P.11: "1- I try to teach students to make inferences by giving them "real-world" examples. 2- I try to encourage students to ask questions. 3- I try to encourage students to use alternative methods to solve problems as well as offer them different problem-solving methods. 4- When concepts that are being learned are difficult, I encourage students to create a movie in their mind. I try to teach them to close their eyes and picture that difficult concept in their mind like a movie playing."

P.26: "I select riddles or some online games that are very effective in developing communicative and critical thinking skills."

P.154: "I ask students to watch a video, and they brainstorm on the topic. They answer several questions through critical thinking."

P.159: "I engage my students in discussion-oriented activities using Mentimeter or Microsoft Teams. My students can chat or share ideas during the lesson, and they can reach agreement or create some tasks together."

The above-mentioned activities are consistent with Bloom's taxonomy as they promote student engagement with learning tasks which encourage application, analysis, and synthesis activities in processing information (Zohar, 1999); these activities require thinking skills more than mere recalling or memorizing the information (Underbakke, Borg, & Peterson, 1993). Turkish EFL teachers have tried to train their students for real-world skills which are needed outside the classroom, too because they engage their students in problem-solving activities instead of just a series of facts to memorize (Burns & Richards, 2012; Conklin, 2012). Turkish EFL teachers have also tried to increase students' sense of control over their ideas and thinking has been much more important than memorizing (Brookhart, 2010). Moreover, evidence of higher-order thinking processes has already been found in online discussion forums (Mcloughlin & Mynard, 2009). Therefore, online discussions can be useful tools for promoting higher-order thinking, which fortunately Turkish EFL teachers consider in their online classes.

Conclusion

As a concluding remark, although Erkut (2020) argued that Turkish higher education system was neither well-prepared for the pandemic crisis of this magnitude, nor ready for effective online instruction, Turkish EFL teachers' conditions seem satisfactory in terms of their level of technological proficiency, perceptions about and implementation of technology in online classes during the Corona virus pandemic. However, this study is a small-scale research, including only 159 EFL teachers, which limits the generalizability of the findings.

References

- Afshari, M., Bakar, K. A., Luan, W. S., Samah, B. A., & Fooi, F. S. (2009). Factors affecting teachers' use of information and communication technology. *International Journal of Instruction*, 2(1), 77–104. Retrieved from https://files.eric.ed.gov/fulltext/ED524156.pdf
- Ahmadi, M. R. (2018). The use of technology in English language learning: A literature review. *International Journal* of Research in English Education, 3(2), 115–125. https://doi.org/10.29252/ijree.3.2.115
- Al-Awidi, H., & Aldhafeeri, F. (2017). Teachers' readiness to implement digital curriculum in Kuwaiti schools. Journal of Information Technology Education: Research, 16, 105–126. https://doi.org/10.28945/3685
- Albirini, A. (2006). Teachers attitudes toward information and communication technologies: The case of Syrian EFL teachers. *Computers & Education*, 47(4), 373–398. https://doi.org/10.1016/j.compedu.2004.10.013
- Alghasab, M. B., Alfadley, A., & Aladwani, A. M. (2020). Factors affecting technology integration in EFL classrooms: The case of Kuwaiti government primary schools. *Journal of Education and Learning*, 9(4), 10–27. https://doi.org/10.5539/jel.v9n4p10
- Almalki, A. (2020). Integration of technology among Saudi EFL teachers. *English Language Teaching*, 13(8), 160–167. https://doi.org/10.5539/elt.v13n8p160
- Arbaugh, J. B. (2007). Does the community of inquiry framework predict outcomes in online MBA courses? Academy of Management Proceedings, (1), 1–6. https://doi.org/10.5465/ambpp.2007.26508387
- Archibald, D. (2010). Fostering the development of cognitive presence: Initial findings using the community of inquiry survey instrument. *The Internet and Higher Education*, 13(1–2), 73–74. https://doi.org/10.1016/j.iheduc.2009.10.001
- Aydin, S. (2013). Teachers' perceptions about the use of computers in EFL teaching and learning: The case of Turkey. *Computer Assisted Language Learning*, 26(3), 214–233. https://doi.org/10.1080/09588221.2012.654495
- Bailey, D. R., & Lee, A. R. (2020). Learning from experience in the midst of COVID-19: Benefits, challenges, and strategies in online teaching. *Computer-Assisted Language Learning Electronic Journal*, 21(2), 178–198. Retrieved from http://callej.org/journal/21-2/Bailey-Lee2020.pdf
- Brookhart, S. (2010). How to assess higher-order thinking skills in your classroom. Alexandria, VA: ASCD.
- Burns, A., & Richards, J. C. (2012). *The Cambridge guide to pedagogy and practice in second language teaching*. Cambridge, UK: Cambridge University Press.
- Çebi, A. (2018). Teachers' perceptions toward technology integration into the language teaching practices. Journal of Narrative and Language Studies, 6(11), 150–177. Retrieved from https://www.nalans.com/nalans/article/view/126/95
- Chaaban, Y., & Ellili-cherif, M. (2017). Technology integration in EFL classrooms: A study of Qatari independent schools. *Education and Information Technologies*, 22, 2433–2454. https://doi.org/10.1007/s10639-016-9552-3
- Conklin, W. (2012). *Higher-order thinking skills to develop 21st century learners*. Huntington Beach: Shell Education Publishing, Inc.
- Daradoumis, T., Martínez-Monés, A., & Xhafa, F. (2006). A layered framework for evaluating on-line collaborative learning interactions. *International Journal of Human-Computer Studies*, 64(7), 622–635. https://doi.org/10.1016/j.ijhcs.2006.02.001

- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. https://doi.org/10.1177/0047239520934018
- Erkut, E. (2020). Covid-19 Sonrasi Yükseköğretim [Higher education after Covid-19]. Yükseköğretim Dergisi Journal of Higher Education (Turkey), 10(2), 125–133. https://doi.org/10.2399/yod.20.002
- Gao, L. X., & Zhang, L. J. (2020). Teacher learning in difficult times: Examining foreign language teachers' cognitions about online teaching to tide over COVID-19. *Frontiers in Psychology: Educational Psychology*, September. https://doi.org/10.3389/fpsyg.2020.549653
- Ghanizadeh, A., Razavi, A., & Jahedizadeh, S. (2015). Technology-enhanced language learning (TELL): A review of resources and upshots. *International Letters of Chemistry, Physics and Astronomy*, 54, 73–87. https://doi.org/10.18052/www.scipress.com/ILCPA.54.73
- Gilakjani, A. P., Sabouri, N. B., & Zabihniaemran, A. (2015). What are the barriers in the use of computer technology in EFL instruction? *Review of European Studies*, 7(11), 213–221. https://doi.org/10.5539/res.v7n11p213
- Golonka, E. M., Bowles, A. R., Frank, V. M., Richardson, D. L., & Freynik, S. (2014). Technologies for foreign language learning: A review of technology types and their effectiveness. *Computer Assisted Language Learning*, 27(1), 70–105. https://doi.org/10.1080/09588221.2012.700315
- Grgurović, M., Chapelle, C., & Shelley, M. C. (2013). A meta-analysis of effectiveness studies on computer technology-supported language learning. *ReCALL*, 25(2), 165–198. https://doi.org/10.1017/S0958344013000013
- Gunes, A. (2020, May 9). Pandemic could be an opportunity for Turkish higher education. University World News: The Global Window on Higher Education. Retrieved from https://www.universityworldnews.com/post.php?story=20200506061559172
- Hanna, L., Barr, D., Hou, H., & McGill, S. (2020). An investigation of modern foreign language (MFL) teachers and their attitudes to computer assisted language learning (CALL) amid the COVID-19 health pandemic. In International Conference on Big Data, IOT and Blockchain (BIBC 2020) (pp. 59–66). Dubai, UAE. https://doi.org/10.5121/csit.2020.101306
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. EDUCAUSE Review. Retrieved from https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and- online-learning
- Ilter, B. G. (2009). Effect of technology: On motivation in EFL classrooms. *Turkish Online Journal of Distance Education-TOJDE*, *10*(4), 136–158. Retrieved from https://files.eric.ed.gov/fulltext/ED506782.pdf
- Ilter, B. G. (2015). How does technology affect language learning process at an early age? *Procedia Social and Behavioral Sciences*, 199, 311–316. https://doi.org/10.1016/j.sbspro.2015.07.552
- İstifçi, İ., Keser, A. D., Serpil, R., Önal, M. A., Alan, B., & Türkyılmaz, S. (2018). An analysis of teachers' and students' perceptions on the use of smart boards in foreign language classrooms. *Turkish Online Journal of English Language Teaching (TOJELT)*, 3(2), 83–110. http://www.tojelt.com/OncekiSayilarDetay.aspx?Sayi=2018/2
- Kern, R. (2006). Perspectives on technology in learning and teaching languages. *TESOL Quarterly*, 40(1), 183–210. https://doi.org/10.2307/40264516
- Khatoony, S., & Nezhadmehr, M. (2020). EFL teachers' challenges in the integration of technology for online Classrooms during Coronavirus (COVID-19) pandemic in Iran. AJELP: The Asian Journal of English Language & Pedagogy, 8(2), 89–104. https://doi.org/10.37134/ajelp.vol8.2.7.2020
- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in Germany. *European Journal* of Teacher Education, 43(4), 608–622. https://doi.org/10.1080/02619768.2020.1809650
- Lam, Y. (2000). Technophilia vs. technophobia: A preliminary look at why second language teachers do or do not use technology in their classrooms. *Canadian Modern Language Review*, 56(3), 389–420. https://doi.org/10.3138/cmlr.56.3.389
- Lee, S. (2014). The relationships between higher order thinking skills, cognitive density, and social presence in online learning. *The Internet and Higher Education*, 21, 41–52. https://doi.org/10.1016/j.iheduc.2013.12.002
- Li, L., & Walsh, S. (2011). Technology uptake in Chinese EFL classes. *Language Teaching Research*, 15(1), 99–125. https://doi.org/10.1177/1362168810383347
- Mcloughlin, D., & Mynard, J. (2009). An analysis of higher order thinking in online discussions. *Innovations in Education and Teaching International*, 46(2), 147–160. https://doi.org/10.1080/14703290902843778

- Merç, A. (2015). Using technology in the classroom: A study with Turkish pre-service EFL teachers. TOJET: The *Turkish Online Journal of Educational Technology*, 14(2), 229–240. Retrieved from https://files.eric.ed.gov/fulltext/EJ1057362.pdf
- Njiku, J., Maniraho, F., & Mutarutinya, V. (2019). Understanding teachers' attitude towards computer technology integration in education: A review of literature. *Education and Information Technologies*, 24(5), 3041–3052. https://doi.org/10.1007/s10639-019-09917-z
- Pallant, J. (2013). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (5th. ed.). Berkshire, England: Open University Press.
- Saqlain, N., & Mahmood, Z. (2013). English language instructors' perceptions about technology-based language learning at Northern Border University in Saudi Arabia. *TOJET: The Turkish Online Journal of Educational Technology*, 12(2), 106–110. Retrieved from https://files.eric.ed.gov/fulltext/EJ1015397.pdf
- Shadiev, R., & Yang, M. (2020). Review of studies on technology-enhanced language learning and teaching. Sustainability, 12(2), 524–545. https://doi.org/10.3390/su12020524
- Spiteri, M., & Rundgren, S. N. C. (2020). Literature review on the factors affecting primary teachers' use of digital technology. *Technology, Knowledge and Learning*, 25(1), 115–128. https://doi.org/10.1007/s10758-018-9376-x
- Underbakke, M., Borg, J. M., & Peterson, D. (1993). Researching and developing the knowledge base for teaching higher order thinking. *Theory Into Practice*, *32*(3), 138–146. https://doi.org/10.1080/00405849309543589
- Zhang, C. (2020). From face-to-face to screen-to-screen: CFL teachers' beliefs about digital teaching competence during the Pandemic. *International Journal of Chinese Language Teaching*, 1, 35–52. https://doi.org/10.46451/ijclt.2020.06.03
- Zohar, A. (1999). Teachers' metacognitive knowledge and the instruction of higher order thinking. *Teaching and Teacher Education*, 15(4), 413–429. https://doi.org/10.1016/S0742-051X(98)00063-8.