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## The Perceptions of Turkish EFL Lecturers on Teaching through Information and Communication Technology

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**Abstract:** EFL teachers act as a bridge between English language and its learners by providing guidance regarding the coherence between language acquisition and Information and Communication Technology (ICT) as a dynamic tool. In this connection, the main aims of this case study were to gain insight into Turkish EFL teachers' perceptions about integration of technology into English language lessons and to find modern implementations. The study sample included 15 EFL lecturers who were selected using purposive sampling. The emergency shift to online education due to the pandemic (Covid-19) at the time of this study enabled all the participants to utilise and experience ICT materials and settings. Data were collected using semi-structured interviews and pre- and post- questionnaires based on the ICT training process. The quantitative data were analysed using descriptive statistics and the qualitative data were analysed using content analysis. The results showed that the training positively affected the participants' perceptions of teaching through ICT and helped them utilize ICT implementations such as digital tools, in-class activities, lesson plans, and evaluation types.

**Keywords:** ICT, 21<sup>st</sup> century skills, language teaching, lecturer perceptions, distance education

### Highlights

What is already known about this topic:

- Adopting technology in language education is one of the most significant criteria of developing communities, and Covid-19 outbreak has accelerated their process to accept innovations.
- Information and Communication Technology provides continuous language education depending upon the achievement of integration.

What this paper contributes:

- This paper investigated the core agent that underlies a prospering ICT integration with English language education.
- With a comprehensive ICT training, EFL lecturers embrace technological innovations through their positive and constructive perceptions, and students to learn beyond conventional education platforms.

Implications for theory and practice:

- Institutions' administrations should equip EFL lecturers so as to handle crises and to adjust their educational standards with 21<sup>st</sup> century learners' profile.
- ICT trainings need to be extended worldwide for both in-service and pre-service lecturers since their perceptions arose from local education settings lead global advancements.



## Introduction

The field of education embracing technology as a way to evolve also leads English language practitioners to observe their context and to comprehend worldwide advancements. They try to synchronize their EFL classrooms with today's educational developments by adopting innovations such as Information and Communication Technology (ICT). ICT represents a worldwide platform including technological devices, networking components and systems that enable people to interact with each other or necessary data (Rouse, 2019). Given the current state of changes, utilizing ICT provides a connection between target language and 21st century learners and lecturers. In other words, ICT can be accepted as a powerful and dynamic tool to teach English language considering the interplay between learners and the century they live in.

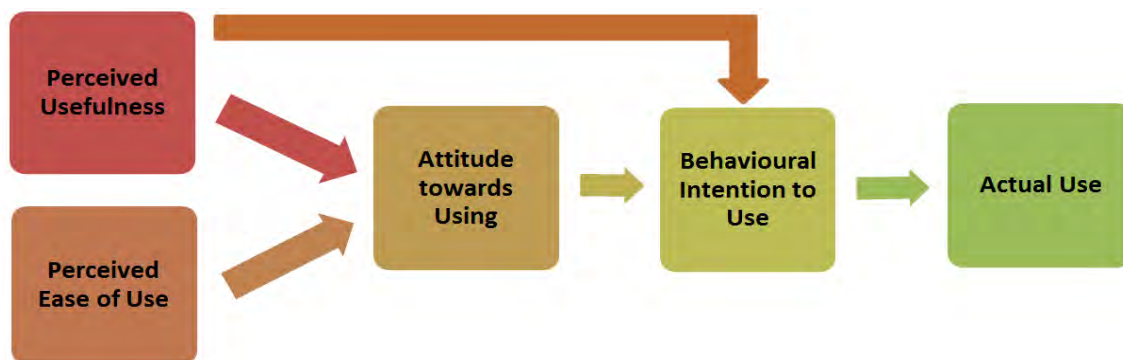
Apart from learners, the role of the teachers cannot be disregarded. The key to reframing foreign language lessons upon technology underlies the perceptions of teachers. As noted by Kumaravadivelu (2006) when foreign language teachers entitle themselves as enlightened eclectic teachers, it means they have an understanding which classroom setting, teaching methods and materials are revised according to the post-methodology era. In addition, ICT is an inseparable part of this era, especially in terms of fast-paced growing and spreading technology. Indivisible unity of ICT and language teaching arises from teachers' notion about technology and their openness to new and current experiences. The feedbacks gained from these attitudes outline their teaching approaches, so both positive and negative results of technology use in lessons need to be handled by teachers in a constructive way to catch the era, which embraces technological innovations and offers new learning opportunities for learners.

## Theoretical Framework

Perceptions underlie every decision we take and shape our attitudes towards the world and other people. Efron defines the term "perception" as "primary form of cognitive contact with the world around" (1969, p.137). Papadakis and Kalogiannakis narrow down the subject into educational aspect in terms of teachers' perception. They state that "the thoughts or mental images which teachers have about their professional activities and their students are shaped by their background knowledge and life experiences and influence their professional behaviour" (2020, p.339). Revealing the importance of teachers' perceptions, Cristina-Corina and Valerica report that adaptation to changes is a satisfactory issue for both teachers and learners (2012). Concerning these descriptions, English language teachers perceive innovations, which the world around them brings into their milieu, analyse and accept or reject reforms through a mental process conceiving their experiences, professions and learners' backgrounds. After the acceptance phase, teachers discover every detail and embrace new roles so as to introduce them to students. Their perceptions shed light on upcoming changings in a classroom. In this respect, ICT constitutes an essential role for educational purposes, particularly for foreign language teaching, since it provides many chances for users and meets needs of modern knowledge society (Ammanni & Aparanjani, 2016). Teachers' acceptance and implementations of ICT open a contemporary way to the world for learners and meet their possible needs related to English language and technology.

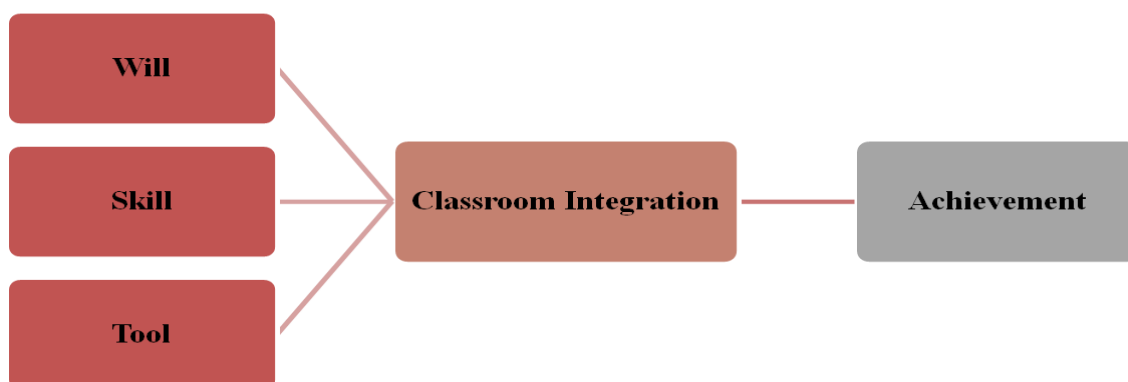
Another important issue is that teachers' perceptions about new adjustments for lessons comprise a basis for efficient teaching. In this case, English language teachers' cognition and understanding about integration of ICT and foreign language teaching are the main frames to be shaped and adapted according to conditions such as learners' preferences, classroom setting, curriculum, pedagogic approaches and so on. Zou's research (2020) based on EFL classrooms comprised of technology illustrates this point clearly. Teachers of the research considered innovative classrooms as motivation sources once they observed the progress of students' confidence and communicative skills. Besides, some instructors perceive the integration of ICT into language teaching as a profound change in their educational settings that eventually ends up with improvement of quality (Yusuf, 2005).

Emerging of technology, on the other hand, has brought about some factors, challenges and benefits to light and has still laid emphasis on teachers' perceptions. EFL teachers' perceptions about integration of technology rely on their technology acceptance also called ICT acceptance nowadays. In two longitudinal studies with 152 active users of technology, Davis (1989) measures how they come to accept it and proposes an advanced model of TRA (Theory of Reasoned Action; Ajzen and Fishbein, 1975) to demonstrate their thinking process phase by phase. As shown in Figure 1 below, Davis's Technology Acceptance Model (TAM, 1989) depends on users' perceptions deriving from usefulness and easiness, and these two determinants are emphasized as 'distinct variables'. Davis (1989) names these factors as Perceived Usefulness (PU) and Perceived Ease of Use (PE), explaining that PU is activated when ICT increases people's productivity with qualitative performance and PE is when ICT makes their struggles or jobs easier. Concisely, the reasons of accepting or rejecting ICT source from people's considerations about effects on their goal or their expectations about benefits and simplicity.



**Figure 1.** Technology Acceptance Model of Davis (1989)

Technology Acceptance Model asserts that users come to phase of 'Actual Use' as long as ICT presents them better job outcomes in an effortless way because this perception develops positive behaviours. TAM is still valid in EFL contexts and tested by many researchers especially for ICT integration (Yi & Hwang, 2003; Teo et al., 2008). Drawing upon more current literature, another criteria of Actual Use of ICT is experience based on the studies of Alfadda and Mahdi (2021). They concluded that experienced learners constructed more positive behaviours and attitudes towards technology through Zoom application during the Covid-19 pandemic. In addition to learner perspective, Vanduhe et al. (2020) also focused on instructors', and found out Tam model facilitated their participation after a training program. The instructors in the research also made benefit of technology for their own professional goals. In contrast to TAM, Knezek, Cristensen, Hancock and Shoho (as cited in Bish, 2017) approach ICT integration from a detailed perspective and focus on classrooms in 2000. They propose the Will-Skill-Tool Model (The WST Model; see Figure 2) on the basis of factors related with teachers' readiness such as environmental circumstances, technic supplies, individual and pedagogic issues.



**Figure 2.** The Will, Skill, Tool Model (Knezek, Cristensen, Hancock & Shoho, 2000)

Velázquez (2006) describes Skill as 'the perceived proficiency of technology use' (p.17), Tool as 'teachers' point of view on access to technology in educational settings and at home' whereas Will as 'beliefs, perceptions, attitudes towards technology' (p.20). It is also mentioned that teachers' perceptions assign ICT's role in a classroom. Knekzek et al. emphasise the importance of these three elements and believe that technology integration will be achieved with the constructive perceptions and positive attitudes of teachers (as cited in Velázquez, 2006).

Although these models root from perceptions varying in time, ICT practices basically encompass many materials and implications. Technological devices, to begin with, have a wide range from handheld devices to output devices that can be clearly seen in everyday life. ICT tools are the instruments for integration and interaction with information and stimulate learners' visual, audial and kinaesthetic perceptions as well (Pourhossein Gilakjani, 2011). In order to match teaching objectives with sources and learners, teachers create an atmosphere that includes collaboration and communication between learners using technological tools (Wang, 2008). These tools can be listed as information systems, software, hardware, and recorders under the scopes of web-based and non-web-based learning suggested by Alkamel and Chouthaiwale (2018). Enhancing quality of English language lessons, lecturers make use of applications, the Internet, projectors, smart phones, computers, blogs, audiotapes, DVDs, books' software, digital materials, social media and so on. The devices take part in both traditional and modern settings. When teachers use these technological devices in the classroom, they make the learning process more comprehensible particularly with the help of Computer Assisted Language Learning (CALL). Timuçin defines CALL 'the use of technology in the form of computers and a transformation process in the institution where the implementation actually take place' (2016, p.262). Although CALL has gained immense popularity with emerging technology in language teaching in the early 1980s, Mobile Assisted Language Learning (MALL) ultimately got ahead of CALL in the light of a specific development, mobility at the beginning of 21<sup>st</sup> century (Almaktary & Al-Kadi, 2017). Nowadays mobile apps are efficient tools to practice a language independent from time and place (Godwin-Jones, 2011). EFL instructors orient their students on the process and procedures of education through several applications such as Supermemo software for vocabulary teaching (Yang & Park, 2012), mobile blogging for observation of learners' progress (Hsu, Wang & Comac, 2008) and SMS for learners' adaptation to daily and cultural interactions (Li & Erben, 2007). Teachers' positive perceptions and attitudes matching with 21<sup>st</sup> century technology increase the quality of activities, instructions, feedbacks and materials not only in the classroom but also outside the classroom. However, traditional classrooms are not the only settings to teach or learn a language as ICT involves virtual classrooms online that can be used via various applications. ICT devices offer many applications to use language in an authentic way, which stimulates learners' motivation and autonomy in distance education (Ammanni & Aparanjani, 2016). Rahman defines (2014) distance education as the communication between learners and teachers via technological devices and the Internet in an online context. Ammanni and Aparanjani (2016) also added that online education is a time-saving instrument for the variability of sources and quick feedbacks. It divides into three virtual environments: Synchronous, asynchronous and hybrid. Perveen (2016) suggests that synchronous environment offers real time interaction, asynchronous environment offers concurrent participants' attendance, and hybrid environment offers optional plan for participants. Perveen (2016) also explains that both synchronous and asynchronous lessons enable EFL learners to collaborate and save time for learners and the teacher.

### **Research Questions**

This case study was conducted with a group of EFL lecturers that passed through both formal education and distance education process integrated with ICT. The study explored their perceptions about ICT in English language teaching and practices as well as their experiences and ICT practices in an EFL context. More specifically, the study sought answers to the following questions:

1. What are the impacts of Information and Communication Technology (ICT) training on the perceptions of EFL lecturers?

## 2. How do the EFL lecturers describe their perceptions of ICT after receiving the training?

### Methodology

#### Research Design

This research was designed as a case study to gain insight into EFL teachers' perceptions about integration of ICT practices with language teaching into lessons and how they blend ICT within language lessons. Drawing upon its nature, the case study design enlightens the realities of research subject and its process with a postmodern perspective (Flyvbjerg, 2006). Since the ultimate purpose of this study is to demonstrate EFL teachers' ICT perceptions in every aspect, the researchers planned to enrich the outcomes through both qualitative and quantitative data. The pre- and post-questionnaires provided quantitative data. Descriptive statistics were employed to observe and to gain information about the lecturers' perceptions before and after online teaching. In order to verify the gathered data, semi-structured interviews were conducted with the same lecturers and the quantitative data were analysed using content analysis.

#### Setting and Participants

The study sample consisted of 15 EFL lecturers who were selected using purposive sampling. Deliberate decisions on sampling uncover rich and extensive information (Patton, 2002). At the time of the study, all the participants were teaching at a preparatory school of a foundation university in Turkey. Their work experiences ranged between one and sixteen years in English teaching field. In addition, a consent form was presented to the lecturers before the questionnaires and interviews. All the lecturers agreed to participate and share their knowledge and perspectives. They contributed to the research three times during the spring term of 2019-2020 academic years.

#### Lecturers' Demographic Information

A demographic information questionnaire (Işık, 2009) was used to obtain data about the participants' background, which could affect their ICT practices. The questionnaire was transferred into Google Forms that help researchers create surveys and apply them online. Demographic variables focus on the participants' age, gender, years of experience, ICT training at both university and in-service, levels of education and departments (Table 1).

Table 1. Demographic Information Questionnaire

Variables	Categories	N	%
Age	21-25	3	20
	26-30	5	33.3
	31-35	3	20
	36-40	2	13.3
	41-45	1	6.7
	46+	1	6.7
Gender	Female	10	66.7
	Male	5	33.3
Education Level	Bachelor of Arts	5	33.3
	Master of Arts	8	53.3
	Doctor of Philosophy	2	13.3
Graduated Department	English Language Teaching	12	80

	English Language and Literature	1	6.7
	American Language and Literature	1	6.7
	Other	1	6.7
	1-5	8	53.3
	6-10		
Years of Teaching Experience	11-15	4	26.7
	16-20	3	20
	21+		
	Yes	8	53.3
ICT Training at University	No	7	46.7
	Yes	8	53.3
ICT Training at In-service Teaching	No	7	46.7

### Data Collection

In this study, as a requirement of individual and public health measures due to the pandemic at the time of the study, all the instruments were administered online. The interview sessions provided qualitative data in addition to quantitative data gathered from the questionnaires.

### Questionnaire for EFL Lecturers' ICT Perceptions

The questionnaire for 'EFL Lecturers' ICT Perceptions' questionnaire was prepared by the researchers based on the relevant literature (Baş, Kubiato & Sünbül, 2016; Hismanoglu, 2012; Shin, H. & Son, J., 2007). This questionnaire consisted of 15 items rated on a 5-point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree). The questionnaire was administered twice during the study. The essential goal of implementation at different times was to take advantage of distance education period and to explore the lecturers' changeable and permanent perceptions before and after online teaching. The researchers considered distance education, in which the ICT usage is typically at maximum, as a process and categorized the questionnaire statements accordingly.

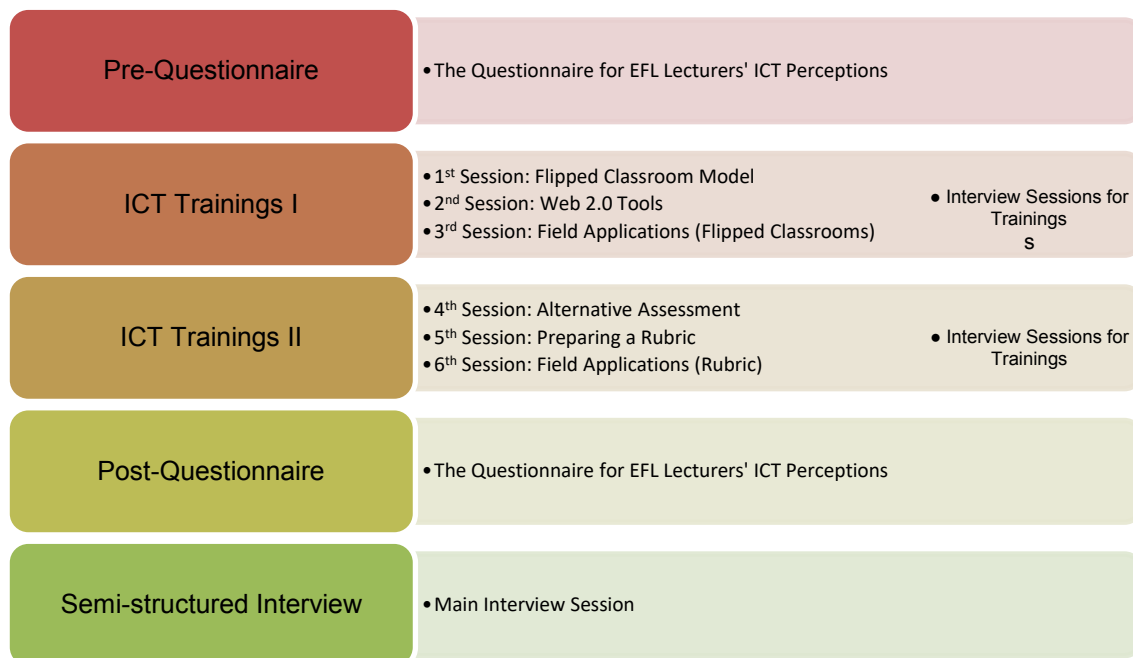
### Semi-Structured Interviews

As Dörnyei highlights, a semi-structured interview is the middle ground letting interviewees detail their ideas while being guided by interviewers (2007). The point of using this type of interview in this study was to listen to EFL teachers' perceptions from their voice, perspective and expression. Therefore, semi-structured interviews were conducted just after the training and also after the distance education period for each lecturer so as to collect data about their own practices integrated with ICT in lessons. Herewith, the researchers aimed to collect the lecturers' immediate perceptions, and subsequent perceptions developed by experiences to gain a wealth of data about the impacts of ICT trainings. The interview questions (see Appendix) were adapted from Cope and Ward (2002) and, Park and Son (2009) regarding related content of this study. The interview consisted of six open-ended questions. The interview sessions took place during the distance education.

### Procedure

It was decided to set up only one group to obtain the necessary data from pre- and post-questionnaires as tests and to support the data with an additional source, semi-structured interviews. In the grand scheme of this study (see Figure 3), the ICT training was the fundamental agent, and both questionnaires were incorporated into the process to evaluate previous and afterward perceptions of the training. It was also assisted with brief semi-structured interviews after each session to obtain

immediate effects of new conceptions on the participants. Also, the main semi-structured interview was placed to end in order to gain in-depth information about ICT perceptions and practices after the training.



**Figure 3.** The Process of ICT Training

First of all, all the participants were asked to join the study. Once they agreed to participate, the Pre-Questionnaire for EFL Lecturers' ICT Perceptions was administered to get their pure perspectives. Their available thoughts at that time let the study illustrate any differences compared to their final knowledge gained by experiences. A training process is of vital importance to scientific research. It needs to be systematic and needs-oriented for language teachers to make them feel competent in using ICT along with the equipment (Dang, 2011). Palacios Hidalgo et. al(2020) state that teacher trainings enable teachers to improve their digital competences whereas they educate their own learners using technology.

After giving the Pre-Questionnaire, several sessions of ICT training for the lecturers were implemented by IT workers and other lecturers qualified in ICT. The participants of this study attended each training session and received training on six different ICT concepts. The first session constituted an introduction of ICT to EFL lecturers. After ICT was introduced, its branches were described and exemplified with various cases of use in language classrooms. The focus was shift into distance education, especially flipped classrooms since it was unusual times for everyone. Developing familiarity between the new model and the lecturers showed them the outline of what they were supposed to do in online classes. Therefore, examples of ICT equipment were presented at the next session including previews of implementations. In the third session, all the lecturers were divided into groups and asked to prepare a lesson plan with necessary Web 2.0 tools. Each group was monitored and guided when they needed support.

As a last step, the trainers explained how to evaluate learners' progress. These evaluation-based on ICT trainings encompassed three sessions. They were designed to introduce the lecturers to alternative assessments in online platforms. The fifth session was about preparing a rubric for different learning goals. The lecturers practiced what they were taught once again, but individually this time. Their performances and rubrics were observed and provided feedbacks from experienced lecturers' trainers. Furthermore, the sessions included a short interview for each participant. They were asked how the

training left a mark on their perceptions and how they were going to utilize new conceptions in their teaching contexts during the distance education period.

Two months of distance education during the pandemic enabled the participants to make use of ICT and practice it as much as possible. Therefore, the procedure continued with the Post-Questionnaire for EFL Lecturers' ICT Perceptions after two months. In order to gather their fresh ideas about ICT and to learn their practices, the semi-structured interview was conducted right after the post-questionnaire as a final phase. The outcomes of the two questionnaires were considered based on the differences and similarities of the lecturers' ICT perceptions.

### Data Analysis

Demographic Information Questionnaire and the questionnaire for EFL lecturers' ICT perceptions, as quantitative data collection tools, were analysed using Statistical Package of Social Sciences (SPSS). The results of the perspective and practice questionnaire were examined utilising **descriptive statistics** with a focus on the differences or/and similarities of perceptions regarding the results of **the pre- and post-questionnaires**. The **semi-structured interviews**, as a qualitative data collection tool, were recorded and transcribed. Data from the interview sessions were analysed through content analysis by using emergent coding considering practices of lecturers.

### Reliability & Trustworthiness

The questionnaire were analysed by using SPSS and Cronbach Alpha were provided for consistency in order to prevent any reliability threats. The Cronbach Alpha value of the questionnaire was found 0.80 being reliable at an acceptable level. The interview questions and the items of questionnaire are based on scientifically proven studies. To ensure a bias-free study, variety between the participants were the primary goal of the researcher and participants from different age groups and experience years were provided. In addition, the participants were informed the purpose of the study in detail to ensure their privacy by both the researcher and the consent form for the trustworthiness of the study.

### Findings

The Pre-Questionnaire were utilized to gain a deeper insight for lecturers' ICT perceptions and practices (Table 2). The first item resulted in the highest mean value ( $M=4.33$ ,  $SD=.89$ ). It describes the perception about how advantageous of being able to use ICT in language teaching. We could suggest that most of the lecturers agreed on ICT's contributions to their teaching context while their responses ranged from disagree to strongly agree. However, Item 15 had the lowest mean ( $M=3.20$ ,  $SD=1.26$ ), which suggested that the lecturers stayed neutral against ICT's time-saving quality considering their professional experiences.

Table 2.Descriptive Statistics of the Questionnaire for EFL Lecturers' ICT Perceptions

Questionnaire Items	Groups	N	Mean	Std.
				Deviation
1. Knowing how to use the ICT equipment to teach a language is a worthwhile and useful skill.	Pre-test	15	4.33	.90
	Post-test	15	4.66	.81
2. ICT equipment could enhance remedial instruction.	Pre-test	15	3.80	1.08
	Post-test	15	4.26	1.09
3. Computers could increase both teachers' and students' productivity.	Pre-test	15	4.00	.84
	Post-test	15	4.06	1.09
4. Working with computers would be enjoyable and stimulating.	Pre-test	15	4.00	1.00
	Post-test	15	4.06	1.03
5. Changing the curriculum to integrate ICT is possible.	Pre-test	15	3.93	.90



	Post-test	15	4.13	1.06
	Pre-test	15	3.80	.80
6. ICT can really improve my teaching practice.	Post-test	15	4.33	1.04
	Pre-test	15	3.60	.83
7. Using technology in the classroom enhance students' interaction with their classmates, instructors or native speakers of English.	Post-test	15	4.06	.96
	Pre-test	15	4.13	.92
8. Online sources provide non-native speakers of English with a rich learning environment.	Post-test	15	4.26	1.16
	Pre-test	15	3.86	.83
9. Students are easily motivated by the use of ICT devices and sources in the classroom.	Post-test	15	4.20	.94
	Pre-test	15	3.80	.94
10. Students can improve their English skills through using the Internet.	Post-test	15	4.26	1.09
	Pre-test	15	3.53	1.18
11. Thanks to ICT related language lessons, students communicate by emailing or chatting with native speakers of English online.	Post-test	15	4.20	1.20
	Pre-test	15	3.40	.82
12. Students are more attentive in Internet-assisted English language teaching classes.	Post-test	15	3.73	1.22
	Pre-test	15	3.40	.82
13. Students use ICT devices for language learning purposes during an in-class activity.	Post-test	15	4.06	.96
	Pre-test	15	3.46	.99
14. Using an ICT device saves a considerable amount of time for my own studies of the English language.	Post-test	15	4.00	1.13
	Pre-test	15	3.20	1.26
15. Preparing and presenting a language lesson integrated with ICT saves a considerable amount of time.	Post-test	15	3.66	1.17

On the other hand, there were a few common results of mean between Item 3 ( $M=4.00$ ,  $SD=.84$ ) and Item 4 ( $M=4.00$ ,  $SD=1.00$ ), and between Item 12 ( $M=3.40$ ,  $SD=.82$ ) and Item 13 ( $M=3.40$ ,  $SD=.82$ ). Items 3 and 4 were found as the point of agreement among the lecturers who were unaware of each other. The agreement was based on the ICT as productivity booster and attraction source for both them and their students. Item 2 ( $M=3.80$ ,  $SD=1.08$ ), Item 11 ( $M=3.53$ ,  $SD=1.18$ ) and Item 15 ( $M=3.20$ ,  $SD=1.26$ ) had the most varied answers from strongly disagree to strongly agree.

The post-questionnaire was utilized to reveal the changing or permanent perceptions and practices of ICT use in language teaching in contrast to the pre-questionnaire and also to observe how the training affected the lecturers' perceptions. All of the means increased, which suggested that lecturers developed some positive perceptions towards ICT and the training process reflected upon their practices. Moreover, Item 11 ( $M=4.2000$ ,  $SD=1.20$ ) which is about lesson goals and ICT materials matching, and Item 13, ( $M=4.06$ ,  $SD=.96$ ) which is about increasing communication through online ways, had the most progress in terms of means of changing perceptions. The total rise in their means was 6.66.

The first question also addressed the common outcomes of the pre- and post-questionnaires. Together they represented to what extent the lecturers' perceptions were affected by the ICT training in terms of item values. Their evaluations shed light onto advancing conceptions of technology in ELT context. Keeping each questionnaire in a comparative perspective made it possible to observe all the changes. The Wilcoxon Signed Test, hence, was employed to identify whether there was a difference between the questionnaires or not.

Table 3. Significance Values of Pre and Post Questionnaire

	Time Interval	N	Mean	Std. Deviation	Wilcoxon Signed Rank Test (z-value)	Sig.
Study Group	Pre-test	15	3.75	0.67	-1,905 <sup>b</sup>	,04
	Post-test	15	4.13	.90		

As can be seen in Table 3, there was a significant difference (.04) between the pre- and post-questionnaire, which suggested that the ICT training and the training of six sessions achieved their objective and proved successful. The training had an impact upon fifteen EFL lecturers, and their perceptions and practices in integration of ICT and English teaching during the training affected positively.

After the six training sessions, each of the participants was asked a basic question: “How does the ICT training session affect your thoughts about teaching English through technology?” In general, the participants stated that they learnt about many opportunities offered by ICT and they realised their need for improvement in this sense even though they considered themselves as EFL teachers following the last updates in the field. They also mentioned that they broadened their limited perspectives and implications thanks to the ICT training. On the other hand, some of the lecturers underlined that they learnt by doing and one of them explained this situation by saying, “The field application helped me practice lesson planning and learner assessment. Only theory was not enough for us.” When it comes to assessment, the lecturers criticized the technology regarding reliability issues. According to some of the interviewees, making use of ICT materials could be seen as stimulator and motivator for learning English, and ICT materials increased language productivity in four skills, too. However, Interviewee 3 emphasized, “The more technology we integrate into our teaching the more support we need” because acquiring new methods meant leaving traditional ones, so this interviewee was worried about the potential situations out of her control. Taking every response into account, the data was categorized under ‘Conceptions’ as a critique component of human perception because the participants frequently uttered their new understandings about teaching English shaped by each ICT training.

The main interview including six questions guided the participants into more detail-oriented thinking and self-analysis process. In the light of the lecturers’ responses, the data were classified under three categories (Table 4) after the transcription. These categories were also all parallel with the interview questions (see Appendix). Their thoughts about ICT materials in language teaching process (question 2) and ICT’s possible contributions to learners’ language development (question 4) were aligned with the category of ‘Conceptions’ like the interview question for the training. On the other hand, utilized ICT materials (question 1) and their impacts on ICT implications (question 3) were considered as ‘Practices’ because the participants shared their experiences and feedbacks about every item and tool adopted to integrate English lesson with technology. Lastly, ‘Profession’ category was selected to cover their responses about the effects of lecturers’ professional experience on ICT integration (question 5) and ICT’s effects on their own profession (question 6).

Table 4. Analysis of Interview Data

EFL Teachers' ICT Perceptions	
Category	Codes
Conception	Participation Positive Approaches Collaboration Real-world Experience Autonomy
Practices	Online Sources Online Platforms Technologic Materials Interactive Activities
Profession	New Experiences Assessment Self-development Problem-solving Skills Cooperation

Every new way to teach a language makes teachers interrogate how beneficial it can be for students and how it can contribute to students' learning. In align with the Conceptions category, the participants answered both of the questions with a positive point of view. They listed ICT's contributions such as promoter of autonomy, conscious learning and engagement, appealing to all senses and attractive, as they had observed in four weeks. One of the interviewee stressed that *"I used to get angry when my students used their phones in class. I met some new apps at the training sessions. I used them for teaching and my students can still use their smart phones. Their favourite activity is a word game- because I introduced it as a competition- we play it every week. They have become more careful and eager for learning English more than I imagined. I wish I knew such beneficial games a long time ago"*. An interviewee also added that the students got quick feedbacks and they learnt from their mistakes without any negative feelings as well as this interviewee observed their mistakes and revised the points they got confused. They also mentioned that ICT enable learners collaborate more and experience real-world in a classroom setting. On the other hand, the questions related with the Practices category gave them a chance to speak of some ICT materials utilized after the trainings. Interviewee 1, an experienced lecturer, told that they used devices as much as possible in the class and the students' positive attitudes for English made them feel they were on the right track. These lecturers obviously gained self-awareness about their own perceptions and used the training to learn more about ICT materials. All the participants mentioned several materials and stated that most of the materials were the same except for a few of them. During the main interview sessions, each material was noted and recorded:

- software of the course books, PowerPoint presentations and Moodle (sources),
- smart board and projector (classroom devices),
- computers, laptops, and smartphones (both classroom and distance education devices),
- Quizizz, Quizlet, Padlet, Voscreen, ThingLink, YouTube, Duolingo, Kahoot! and Discord (applications and Web 2.00 tools for practice), and
- Zoom, Microsoft Teams (applications for video conferencing).

There were also interviewees referring the ICT training as an important factor for their practices to teach English during the distance education period. According to their statements, they made use of the training as sources of different kinds of activities and assignments. The interviewees describing themselves incompetent in technology articulated that the pandemic had left them no chance but utilising ICT. The questions based on the Profession category revealed many outcomes for the research such as new teaching experiences, improving problem-solving skills and online assessment types implemented during the term. A lecturer also described their feelings about self-development and cooperation by stating *"I now make use of free online courses to learn new sources to integrate into my teaching. I professionally share what I learnt and heard about my colleagues and their useful practices. By doing so, I feel as a part of the team which offers a mutual win-win relationship. Although it was*

*challenging at first, I became modifier of my teaching in an informed way*". Compulsory online courses were the milestone for their teaching. They fostered a new perspective for English language practices thanks to the training and prepared more interactive activities.

### Discussion

Teachers' efficacious ICT conceptions and willingness promote learners to make use of educational technology in a progressive way because technology and digital sources enhance learning after all (Geer & Sweeney, 2012). One benefit of ICT is the materials appealing to different learning types, yet every learner can face with some obstacles and the materials can help learners overcome them. In this study, the lecturers were more than neutral to ICT materials as additional learning opportunity in general. After the ICT training and two months of active technology usage, the lecturers' perceptions of ICT use in language teaching changed increasingly positively.

Before the COVID-19 period, computers were used in traditional classrooms to open software of the course books and they have been still used after the quarantine to join lessons, to share screen and so on. The lecturers were implicitly expected to compare both of those time periods: teaching prior to and afterwards the ICT training. The lecturers' first conceptions indicated that most of them perceived ICT equipment, especially computers, fruitful and convenient for teaching English. We could therefore suggest that the lecturers already considered computers as productive and they believed computers could expand the use of English even more.

Apart from these, learner interactions can be the most apparent indicator of language acquisition. Nonetheless, interactions can occur in different ways, written or verbal. The lecturers in this study observed the benefits of ICT as a feedback of their endeavours during the lessons. It shows that technology can become a trigger for written or verbal learner interaction when foreign language lessons include more technology as real life does. The way of ICT use through devices and online sources impacts motivation's quality. The lecturers' perceptions about learners' motivation changed positively as much as their ICT use. This interdependent system occurred as a result of their ICT practices, so the constructive perceptions affected learners' motivation to participate English lessons mediated with ICT sources and devices. The training nurtured the lecturers about functions of technology in terms of learners' cognitive and affective attitudes towards English.

However, at the beginning of the training sessions, the lecturers conveyed one of the lowest agreements on impacts of Internet-assisted teaching to increase learner attention. It was important and vital that the lecturers needed to foster an understanding about learners' roles which they bring into classes with. In the later stages of the training, their negative perceptions evolved into positive ones as they practiced educational technology by integrating real life conditions. It can be inferred that learners' social identities, one of the most efficacious roles, accelerates learning a language if it is activated. While gathering learners' attention can be achieved to some extent, maintaining their attention can be challenging. Especially technological devices establishing connections with the real world can go beyond language learning. However, the lecturers' earlier statements suggested that students used ICT devices for both learning and other reasons. The lecturers' perceptions were neutral against technology's contributions to their teaching. However, the training displayed many ways to practice technology in their own teaching context. This attempt resulted in more agreement because they experienced ICT continuously at the maximum level and observed that their teaching could be improved more with updates in the field.

In terms of time saving, EFL teachers, as decision makers, design language lessons by spending a considerable amount of time. Even though it is still questionable whether technology saves or consumes time, getting professional in ICT materials buys time. The lecturers were well trained about educational devices and were asked how these materials impacted their valuable time for their own studies and in-class activities. The lecturers' statements confirmed technology's profits on saving time. They

considered ICT devices more helpful for their professional development compared to the ideas they had before.

Regarding the increasing use of technological materials such as Web 2.0 tools, the EFL teachers' perceptions towards ICT showed diversity. However, challenging issues in material usage decreased day by day because of the training and field applications. The lecturers' first impressions were neutral or negative at first since they were worried about the usage and managing the class on a digital platform, which was an unusual practice for them. The training equipped them with a new perspective about educational technology and presented a rich collection of materials by letting them experience in advance. Drawing upon the post-questionnaire's results, the lecturers practiced ICT and took advantages of ICT tools, yet the qualitative findings from the final interview shed light into their inner conceptions. The more they profited from the ICT the more they became eager to use technology, prepare lessons for a flipped classroom and conduct activities blended with Web 2.0 tools. In fact, they developed positive perceptions gradually after they were introduced to ICT in the training sessions. To build a profitable conception, trainings should be well designed by institutions to equip language teachers with accessible technological tools (Redecker, 2009).

In this study, transmitting an available classroom setting into the digital world was exhausting and hard to deal with for the lecturers. After English lessons started online, the lecturers realised that the ICT materials are not the challenge but facilitators to adapt them to innovations and components to optimize learners' language production as the trainers expressed. All the lecturers shared that they started to utilize computers for not only activities but also teaching grammar, monitoring group works and giving tasks since they were informed about ICT equipment in the training. Some of them were already proficient in using technology, but ICT practices maximized their interaction and also had more time for extra activities for learners.

Moreover, the EFL lecturers stated that they were more autonomous now about technology to tackle with problems individually because the administration had a bigger role in face-to-face education system. Another factor that also contributed to this autonomy development was that they took on the role of a researcher to prepare lesson content. Finally, sharing their knowledge with other lecturers throughout their practice reinforced the colleague collaboration. This constructive communication made them feel valuable parts of a great whole in education field integrated with technology. As a matter of fact, we could suggest that innovation in ELT spread to a wide scope through individual and reflective experience. Thus, in this study, this collective professional development among the EFL lecturers turned out to be one of the important outcomes of ICT.

### **Conclusion and Suggestions**

Considering the process-oriented characteristic of this study, the EFL lecturers' perceptions about integration of Information and Communication Technology into language lessons were accepted as the core and given utmost importance. Therefore, their perceptions were collected in every step of the research. Data were analysed through both qualitative and quantitative to present an objective study. The results showed that the lecturers were capable of altering and improving their perceptions since they are the only authority in their own context to implement innovations which surround the world profoundly. The training impacted each of them and led their practices by demonstrating the necessary basis of ICT such as tools, in-class activities, lesson plans, and evaluation types and so on. The lecturers started to develop positive perceptions towards ICT integrated lessons when they embraced technology as an inseparable part of real world and learners as innovative people of information age. The results of questionnaires and interviews proved that the lecturers were the initiator agents of advancements in their professional development and language learners' language learning.

The findings of this study have to be seen in light of some limitations. First of all, the study was conducted in a private university in Turkey. Therefore, the results may not be completely generalizable. Teachers

from different contexts can offer more comprehensive results for English Language Teaching field. Considering the limitations, it is suggested that different locations can be included to give more lecturers voice and to gain more insight of their perceptions after a brief training. On the other hand, this study can be conducted through different quantitative instruments in various educational institutions and then the results can be analysed comparatively to see whether there is a difference between their perceptions or not.

### References

- Alfadda, H. A. & Mahdi, H. S. (2021). Measuring Students' Use of Zoom Application in Language Course Based on the Technology Acceptance Model (TAM). *Journal of Psycholinguistic Research*, 50, 883-900. <https://doi.org/10.1007/s10936-020-09752-1>
- Alkamel, M. A. A. & Chouthaiwale, S.S. (2018). The use of ICT tools in English language teaching and learning: A literature review. *Veda's Journal of English Language and Literature - JOELL*, 5(2), 29-33. <https://joell.in/wp-content/uploads/2018/04/29-33-THE-USE-OF-ICT-TOOLS-IN-ENGLISH-LANGUAGE.pdf>
- Almaktary, H. M. A. & Al-Kadi, A. M. T. (2017). CALL in postmethod era. *Indonesian Journal of EFL and Linguistics*, 2(2), 133-146. <http://dx.doi.org/10.21462/ijefll.v2i2.33>
- Ammanni, S. & Aparanjani, U. (2016). The role of ICT in English language learning and teaching. *International Journal of Scientific & Engineering Research*, 7(7), 1-7. <https://www.ijser.org/researchpaper/THE-ROLE-OF-ICT-IN-ENGLISH-LANGUAGE-TEACHING-AND-LEARNING.pdf>
- Anikina, Z., Sobinova, L. & Petrova, G. (2015). Integrating telecollaboration into EFL classroom: Theoretical and Practical Implications. *XV International Conference "Linguistic and Cultural Studies: Traditions and Innovations" LKTI* (156-161). Russia. <https://doi.org/10.1016/j.sbspro.2015.10.045>
- Atteh, E., Adams, A. K., Ayiku, F. & Kpai, H. (2020). A survey of junior and senior high school teachers' perceptions and perceived skills of ICT integration in teaching and learning of mathematics. *Asian Journal of Advanced Research and Reports*, 11(2), 1-7. <https://doi.org/10.9734/ajarr/2020/v11i230258>
- Baş, G., Kubiato, M. & Sünbül., M. (2016). Teachers' perceptions towards ICTs in teaching-learning process: Scale validity and reliability study. *Computers in Human Behavior*, 61, 176-185. <https://doi.org/10.1037/t53684-000>
- Bish, D. W. (2017). *Increasing the impact of ICT in language learning: Investigating the effect of teachers' ownership of microblending CALL in the classroom within the WST of ICT use* [Doctoral Dissertation, University of Exeter]. TESOL. <https://ore.exeter.ac.uk/repository/handle/10871/33190>
- Cope, C. & Ward, P. (2002). Integrating learning technology into classrooms: The importance of teachers' perceptions. *Educational Technology and Society*, 5(1), 67-74. [https://www.researchgate.net/publication/243963426\\_Integrating\\_learning\\_technology\\_into\\_classrooms\\_The\\_importance\\_of\\_teachers'\\_perceptions](https://www.researchgate.net/publication/243963426_Integrating_learning_technology_into_classrooms_The_importance_of_teachers'_perceptions)
- Cristina-Corina, B. & Valerica, A. (2012). Teachers' perceptions and attitudes towards professional activity. *Procedia-Social and Behavioral Sciences*, 51, 167-171. <https://doi.org/10.1016/j.sbspro.2012.08.139>
- Dang, X. T. (2011). Factors influencing teachers' use of ICT in language teaching: A case study of Hanoi University, Vietnam. *The 4th Edition of the ICT for Language Learning conference*. [https://www.researchgate.net/publication/228395987\\_Factors\\_Influencing\\_Teachers'\\_Use\\_of\\_ICT\\_in\\_Language\\_Teaching\\_A\\_Case\\_Study\\_of\\_Hanoi\\_University\\_Vietnam](https://www.researchgate.net/publication/228395987_Factors_Influencing_Teachers'_Use_of_ICT_in_Language_Teaching_A_Case_Study_of_Hanoi_University_Vietnam)
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 3(3), 319-339. <https://doi.org/10.2307/249008>

- Efron, R. (1969). What is perception? In R. S. Cohen, & M. W. Wartofsky (Eds.), *Proceedings of the Boston Colloquium for the philosophy of science 1966-1968* (pp. 137-173). Springer. [https://doi.org/10.1007/978-94-010-3378-7\\_4](https://doi.org/10.1007/978-94-010-3378-7_4)
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245. <https://doi.org/10.1177/1077800405284363>
- Geer, R. & Sweeney, T. (2012). Students' voices about learning with technology. *Journal of Social Sciences*, 8(2), 294-303. <https://doi.org/10.3844/jssp.2012.294.303>
- Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning & Technology*, 15(2), 2-11. <https://core.ac.uk/download/pdf/84321238.pdf>
- Helm, F. (2015). The practices and challenges of telecollaboration in higher education in Europe. *Language, Learning and Technology*, 19(192), 197-217. <https://doi.org/10.125/44424>
- Hismanoglu, M. (2012). Prospective EFL teachers' perceptions of ICT integration: A study of distance higher education in Turkey. *Educational Technology and Society*, 15(1), 185-196. <https://eric.ed.gov/?id=EJ979476>
- Hsu, H., Y., Wang, S. & Comac, L. (2008). Using audioblogs to assist English language learning: An investigation into student perception. *Computer Assisted Language Learning*, 21(2), 181-198. <https://doi.org/10.1080/09588220801943775>
- Işık, Ö. (2009). Turkish EFL teachers' attitudes towards ICT integration in language classrooms. [Master's Thesis, Uludağ University]. Graduate School of Social Sciences, Bursa. <http://hdl.handle.net/11452/2883>
- Kumaravadivelu, B. (2006). Understanding language teaching: From method to postmethod. *ESL & Applied Linguistics Professional Series*. Lawrence Erlbaum Associates. <https://doi.org/10.4324/9781410615725>
- Li, J. & Erben, T. (2007). Intercultural learning via instant messenger interaction. *CALICO Journal*, 24(2), 291-231. <https://doi.org/10.1558/cj.v24i2.291-312>
- Papadakis, S. & Kalogiannakis, M. (2020). *Exploring preservice teachers' attitudes about the usage of educational robotics in preschool education*. IGI Global. <https://doi.org/10.4018/978-1-7998-4576-8.ch013>
- Park, C. N. & Son, J. B. (2009). Implementing computer-assisted language learning in the EFL classroom: Teachers' perceptions and perspectives. *International Journal of Pedagogies and Learning*, 5(2), 80-101. <https://doi.org/10.5172/ijpl.5.2.80>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. SAGE Publications.
- Palacios Hidalgo, F. J., Gomez Parra, M. E. & Huertas Abril, C. A. (2020). Digital media competences for EFL teachers. *Teaching English with Technology*, 20(1), 43-59. <https://files.eric.ed.gov/fulltext/EJ1242656.pdf>
- Perveen, A. (2016). Synchronous and asynchronous e-language learning: A case study of Virtual University of Pakistan. *Open Praxis*, 8(1), 21-39. <https://doi.org/10.5944/openpraxis.8.1.212>
- Pourhossein Gilakjani, A. (2011). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal Studies in Education*, 2(1), 104-113. <https://doi.org/10.5296/jse.v2i1.1007>
- Pratt, M. K. (2019, July). *Information and communication technology*. Teach Target. <https://searchcio.techtargget.com/definition/ICT-information-and-communications-technology-or-technologies>
- Rahman, H. (2014). The role of ICT in open and distance education. *Turkish Online Journal of Distance Education*, 15, 162-169. <https://dergipark.org.tr/tr/download/article-file/155757>
- Redecker, C. (2009). *Review of learning 2.0 practices: Study on the impact of web 2.0 innovations on education and training of Europe*. European Commission. <https://doi.org/10.4236/jss.2021.96007>
- Teo, T. Chai, C. S., Hung, D. & Lee, C. B. (2008). Beliefs about teaching and uses of technology among pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 36(2), 163-174. <https://doi.org/10.1080/13598660801971641>
- Vanduhe, Z. V., Nat, M. & Hasan, H. F. (2020). Continuance Intentions to Use Gamification for Training in Higher Education: Integrating the Technology Acceptance Model (TAM), Social Motivation,

- and Task Technology Fit (TTF). *IEEE*, 8, 21473-21484. <https://doi.org/10.1109/ACCESS.2020.2966179>
- Velázquez, C. M. (2006). *Cross-cultural validation of the will skill tool model of technology integration* [Doctoral Dissertation, University of North Texas]. [https://digital.library.unt.edu/ark:/67531/metadc5256/m2/1/high\\_res\\_d/dissertation.pdf](https://digital.library.unt.edu/ark:/67531/metadc5256/m2/1/high_res_d/dissertation.pdf)
- Wang, Q. (2008). A generic model for guiding the integration of ICT into teaching and learning. *Innovation in Education and Teaching International*, 45(4), 411-419. <https://doi.org/10.1080/14703290802377307>
- Yang, J. & Park, J. (2012). Software Review: SuperMemo UX-extreme English advanced and proficient. *CALICO Journal*, 29(4), 718-726. <https://doi.org/10.11139/cj.29.4.718-726>
- Yi, M. Y. & Hwang, Y. (2003). Predicting the use of web-based information systems: Self-efficacy, enjoyment, learning goal orientation, and the technology acceptance model. *International Journal of Human-Computer Studies*, 59(4), 431- 449. [https://doi.org/10.1016/S1071-5819\(03\)00114-9](https://doi.org/10.1016/S1071-5819(03)00114-9)
- Yusuf, M. O. (2005). Information and Communication Technology and Education: Analysing the Nigerian national policy for information technology. *International Education Journal*, 6(3), 316-321. <https://eric.ed.gov/?id=EJ854985>
- Zou, D. (2020). Gamified flipped EFL classroom for primary education: Student and teacher perceptions. *Journal of Computers in Education*, 7, 213-228. <https://doi.org/10.1007/s40692-020-00153-w>

## Appendix

### Semi-structured Interview Questions

#### **The Interview Question for Trainings**

How does the ICT training session affect your thoughts about teaching English through technology?

#### **The Interview Questions for the Main Interview Session**

1. What ICT materials did you utilize in your classroom?
2. What do you think about the use of ICT materials in language teaching process?
3. What factors do you think influenced your use of ICT practices?
4. Do you think ICT contributed to learners' language development? If yes, how? If no, why not?
5. How did your professional experiences affect this process?
6. How did the process of integration ICT and language teaching influence your profession?

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