RESEARCH ARTICLE

Exploring English as a foreign language students' perceptions and needs of digital competences in a Turkish higher education context

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Abstract

The purpose of this study is to explore the perceptions of college students towards digital competences and how they evaluate their needs for competence in learning and using English as a foreign language (EFL). The participants are 20 students (10 males and 10 females) learning EFL at the school of foreign languages of a private university in İstanbul, Türkiye. Data were collected via a socio-demographic questionnaire and semi-structured interviews. For the analyses of the qualitative data, codes, and themes were determined and organized according to the inductive thematic analysis approach, for which Braun and Clarke's (2006) six-step procedure was followed. The results revealed themes of skills for digitalization, ownership of digital tools, positive attitudes towards digital competences in language education, needs relating to language use and learning: assessment, communication, interaction, resources, information, lessons and teachers, and finally, differences between before and after distance education in terms of digital competences. Compared with the present literature, tertiary level EFL learners have positive views of digital competences that cover widely accepted definitions and perceive their own digital competence levels as sufficient, teachers are perceived as having more digital competence than students. Digital competences are widely used in lessons, extracurricular activities, and assessment-evaluation processes, even though school curricula do not sufficiently prioritise them. They also believe that they need similar digital competences in foreign language education, parallel to literature. Although it has been shown that the school gives students enough opportunity to enhance their digital competences, there are still several suggestions made by the participants to advance their academic and professional goals. Furthermore, it is thought that national higher education policies do not place enough emphasis on this issue. In conclusion, digital competences should be prioritised, according to suggestions made by national policymakers, institution administrators, and university instructors as well as students.

Keywords
Digital competences, Distance education, English as a foreign language, perceptions.
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Introduction

Since the turn of the 20th century, there has been substantial transformation in people's lives due to the flood of technical advancements. One of the most notable changes

sparked by technology advancements was the use of educational technologies (EdTechs). As a result of the high rates of access to the Internet and online resources, e-learning has grown by 900% since 2000, according to a recent report by Research and Markets (2023), making it the education business sector with the highest growth. In English Language Teaching (ELT) field, research emphasizes the role of Information and Communication Technologies (ICT) in language learning. Studies also conclude that education assisted with digital tools and content along with multimedia and the Internet facilitates the learning and teaching processes since the emergence of such EdTechs (Boz & Çoban, 2015).

With the technological advancements of the 21st century, digital competence is considered one of the most crucial skills becoming highly significant in education (Özbay & Özdemir, 2014). Cognitive, emotional, and social skills are linked with technical processes to create digital literacy, and these processes call for a continual focus on the most recent technological advancements particularly in education, not only in Türkiye but also throughout the globe (Nawaz & Kundi, 2010). The instructor, student, and learning environment have all changed of due to acting by the demands of the 21st century. One of the educational levels most impacted by digital technologies can be higher education. The ongoing growth of these technologies has created an environment conducive to innovative teaching-learning methods (Fernández-Batanero et al., 2021). Nevertheless, the higher education industry was reported to be one of the least digitalized and most labour-intensive industries prior to the COVID-19 epidemic (Humpl & Andersen, 2022). The COVID-19 pandemic substantially changed the character of education globally, necessitating the use of digital technology and online learning techniques by higher education institutions. Building digital competences is necessary to effectively navigate this new educational paradigm (Hodges et al., 2020; Koehler & Mishra, 2016). The swift transition to remote learning and emergency distance learning caused challenges for university professors as well as students. As higher education moved toward a competence-based approach, educators in these institutions have started to feel the need to become more digitally literate (Trubavina et al., 2021).

Numerous studies have examined the digital competencies that university instructors and students need in conventional face-to-face learning environments. However, the pandemic's extraordinary effects and the accompanying shift to distant learning have forced a re-evaluation of these competences in the context of online and remote instruction. As a result, a growing body of literature focusing on the digital skills teachers and students need to successfully navigate the challenges posed by the pandemic and distance learning has emerged (Sangrà et al., 2012; Zawacki-Richter et al., 2020). For instance, according to studies comprehensively reviewing the relevant literature conducted by Alférez-Pastor et al. (2023), Başaran (2017), Fernández-Batanero et al. (2021), Pettersson (2018), and Zhao et al. (2021), it is evident that both instructors and students, at all levels as well as at higher education, encounter difficulties in effectively utilizing digital competences within their educational practices, regardless of their status as digital natives or immigrants. Carrying out a study regarding perceptions of EFL learners towards digital competences is essentially the goal of this study in order to move forward with adopting digital competences. The present study attempts to fulfill this need by examining college students' perceptions of digital competences and how they evaluate their level of competence and their needs in that context.

Literature review

Digital competences

The notion of digital competences can be related to the concept of digital literacy, which was primarily discussed by Tyner (1998). 'Literacy' describes the ability to read, but it is currently used in a broader and societal context, which reaches us to the term 'competence' (Buckingham, 2006). Various official documents published by the European Commission (2006, 2007a, 2013, 2018) define digital competences as one of the nine key competences citizens need to participate in today's society. Digital competences can be described as the skills of individuals to ensure the use, storage, and production of information on computers or any other mobile electronic devices and to direct communication and cooperation with others on the Internet (European Commission, 2007b).

In policy documents and studies created by international organizations, digital competence substantially incorporates digital skills in addition to social-emotional components for utilising and comprehending digital technologies. For instance, digital competence is offered among the Lifelong Learning Competences proposed by the European Parliament, this is given as a description within the digital competence framework: "...the use of digital technologies broadly, confidently and critically to acquire information, communicate and solve fundamental problems in all aspects of life..." (European Parliament, 2006, p.11). Five categories of digital competence for European citizens have been defined under this framework as acknowledged by the Turkish Ministry of National Education (MoNE) (Turkish Ministry of National Education, 2017). Furthermore, the Centre for the Development of Digital Competences of the European Parliament developed another conceptual framework for educators in 2017 (Redecker, 2017). Digital skills are presented in six categories in order to help educators improve their digital literacy. This conceptual framework gives advice on applying technical skills in training and courses rather than concentrating on the technical skills themselves (Turkish Ministry of National Education, 2017). The term "digital competence" is defined as follows in a study created by the United Nations Conference on Trade and Development (UNCTAD) within the United Nations in 2019: "...digital competence encompasses the knowledge and skills required for an individual to be able to use ICT to achieve goals in their personal or professional life..." (UNCTAD, 2019, p. 3).

Apart from the digital competences being a sub-domain of lifelong learning, digital tools have become the most significant learning and teaching environment in the 21st century. Digital tools are important in the production, sharing, teaching and learning of information. Some of the benefits of digital tools are offering a flexible learning opportunity for students of all ages, making the learning process independent of time and place, and offering learners the opportunity to learn at their own pace (Day, 2002; Trilling & Fadel, 2009; Van Laar et al., 2017). For learners to take advantages of these benefits effectively and efficiently, teachers are supposed to have high levels of digital competences for the production and delivery of contents as well as assessment. The importance of being digitally competent teachers in the digital era and its close

relationship with the quality of education in the 21st century has been the concern of different reports published by international institutions (Lázaro-Cantabrana et al., 2019).

Digital education in Türkiye

Digital competence stands out as an important challenge for the educational systems of the new era of cutting-edge technologies. The current Turkish national curriculum focuses on integrating digital skills into schools to support subject learning. Within the scope of the Turkish Qualifications Framework prepared to ensure the classification of national qualifications in line with the European Qualifications Framework, eight key competences that all individuals should acquire in the lifelong learning process have been identified (YÖKAK, 2016). As one of the eight key competences in this framework, digital competence is defined as the safe and critical use of information society technologies for work, everyday life, and communication. Digital competence includes the safe and critical use of information society technologies for business, daily life, and communication. It is supported through basic skills such as access to information through ICT and the use of digital devices for the evaluation, storage, production, presentation, and exchange of information, as well as participation in common networks and communication online.

On the other hand, within the scope of the General Qualifications for the Teaching Profession published by the MoNE (Turkish Ministry of National Education, 2017), digital competence is not defined as a separate field. During the pandemic process, in the Digital Literacy Teacher's Guide, one of the guidebooks published with teachers by the Turkish Ministry of National Education (2019), digital literacy was defined as the set of knowledge, skills and attitudes needed to participate in digital life, to live, learn and work in a digital society. By the MoNE General Directorate of Teacher Training and Development, within the scope of the General Qualifications for the Teaching Profession, the concept of digital competence is not defined as a different field. However, in the indicators of the competence to manage the teaching and learning process in the professional skills competence area, there is an indicator for teachers' digital competence with the statement '…uses ICT effectively in the teaching and learning process'. On the other hand, there are objectives related to digital transformation in the 2023 Education Vision prepared by the MoNE (Turkish Ministry

of National Education, 2019, p. 94). Although there is no direct target specific to the development of teachers' digital competences, some targets related to the development of teachers' digital skills are included in other targets. For example, two objectives are set within the scope of Digital Content and Skill Supported Transformation in Learning Processes:

> Target 1: An ecosystem will be established for the development of digital content and skills
>
> Objective 2: Content will be produced for the development of digital skills and teacher trainings will be organised

Within the scope of digital literacy skills, four skills were defined as (1) processing skills; (2) thinking skills; (3) collaboration skills, and (4) awareness skills. In addition to the basic concepts summarised above, some suggestions are given for digital literacy in practice, promoting digital literacy in the classroom, issues to be considered, and improving students' digital literacy. In addition to the guide, information and educational videos on cyber security and the correct use of technology in the digital competence frameworks in the Education Informatics Network (EBA), which is used as a distance education portal in Türkiye, are available to students, teachers and families online in the Cyber Security Portal tab. Various online workshops, certificate programs and in-service trainings were also organised by the MoNE during the pandemic period to improve the digital literacy and competences of teachers and school administrators.

Previous studies

Examining the research conducted in Türkiye and elsewhere on students' digital abilities, it has been found that having a personal computer (Arslan, 2019; Korkmaz et al., 2019; Puentedura, 2006), having a consistent Internet connection, using EdTechs and applications when teaching, receiving technological education (Korkmaz et al., 2019), and taking part in vocational courses and projects (Casañ-Pitarch & Candel-Mora, 2021; Dempsey & Burke, 2020; Gençtürk-Erdem et al., 2021; Ito et al., 2009) all affect how much time people spend online or on digital devices. Several studies (Aktamış & Arıcı, 2013; Baş & Yıldırım, 2018; Gezer & Ersoy, 2021; Gürleroğlu, 2019; Karmila et al., 2021; Korkmaz et al., 2019; Mete & Batıbay, 2019; Ortaakarsu & Sülün,

2022; Özden Köse et al., 2021; Öztürk & Akgün, 2012; Poçan et al., 2023; Şimşek & Tuncer, 2019;) have found that incorporating various web 2.0 tools into instructional practices enhances student motivation, contributes to their academic achievement, and fosters a positive attitude towards the subjects varying from science to maths, to social sciences and languages. Significant outcomes have been attained from these studies. A recent study conducted by Metin (2022) identified a modest positive association between students' digital competence and their preference for visual and tactile learning modalities. Nevertheless, in some of the research examined, the use of Web 2.0 tools was shown to be associated with factors such as motivation and academic achievement. However, it is worth noting that most of these studies were conducted at pre-tertiary levels, which makes it obvious that the impacts of digital competences ought to be investigated at higher education level.

Other studies highlighted that although accessing and using digital platforms may appear simple, doing so effectively calls for digital competences (Durodolu & Mojapelo, 2020). For instance, Koyuncuoglu (2022) found that university students frequently had intermediate levels of digital competence but difficulty in evaluating their skills for cyber security. The results of a study conducted by Göldağ and Kanat (2018) revealed that whether students have social media accounts is not significantly related to the level of their digital competences. Onursoy (2018) also carried out a study that found that the literacy skills of college students are insufficient because it was emphasized that accessing digital environments and using digital tools skillfully does not mean being a good digital literate. Along with these findings, it is also reasonable to infer that the concept of digital competences is not widely and correctly understood. Kuru (2019) concluded that teacher candidates who have recently begun their studies at university lack awareness about the idea of digital literacy, that some candidates perceive the concept incorrectly, and that candidates judge digital capabilities via technological literacy. This is where the value of developing digital capabilities is relevant. Critical thinking skills like investigation, questioning, problem-solving, and decision-making are crucial for becoming technologically proficient (Duran & Özen, 2018).

The current study

In the current study, students' digital competences are investigated from a broad perspective to gain insights into how they learn and prepare for life with their digital skills. As it is crucial for students to utilise their digital skills in the learning processes, understanding their position towards these competences is significant to integrate them into the curriculum and national policies. The local and international literature reviews partially reveal the learners' perspectives on this general but currently crucial issue in regard to the curriculum, classroom activities, and assessment-evaluation activities in institutional and national levels. However, a joint examination of students' digital competences and addressing the issue of differentiation according to various perspectives is needed. Studies, especially the ones designed qualitatively, that deal with this issue in depth are almost non-existent— no research designed like this present study has been found. The value of this study is based on the extensive input reflecting the perspectives of EFL learners at the university level from various aspects thanks to semi-structured interviews rather than just evaluating or assessing their digital competences through questionnaires or surveys. This, eventually, would yield some findings that have not been observed in previous studies. Consequently, the purpose of this study is to ascertain the general and unique perceptions of students in a higher education institution regarding digital competences in general and in terms of language learning, how they perceive digital competences and what kinds of digital competences are required in language learning processes. Thus, the study aims to present thorough justifications and consequences from students for the following research questions:

1) What are the EFL students' perceptions about digital competences?

2) In which areas of education do EFL students feel the need to have digital competences?

Method

Setting and participants

The participants of the study were 20 Turkish students learning EFL at the School of Foreign Languages of a private university in İstanbul, Türkiye. The genders of the student participants are exactly equally distributed: 10 female, 10 male. The average age

of the students was 21.4. While the oldest student was aged 43, the youngest was 18. The proficiency levels of participants varied from A2 to B2, all studying at English Preparatory School before their faculty departments.

Data collection procedure and instruments

After obtaining the ethics committee approval from the university in which the research took place (Approval number: 2023/01-17), interviewees were invited to participate in the study by individual e-mails. 134 students were sent e-mails with the attachments of informed consent forms providing them with information about the context and the purpose of the study as well as ethical concerns. 20 participants were randomly selected among the ones who agreed to take part in one-to-one interviews.

In qualitative research, open-ended questions are frequently asked during interviews in order to elicit the participants' experiences and opinions (Creswell, 2012). Interview questions were prepared specifically for the study purpose and were not adapted from other studies. Eventually, individual semi-structured interviews were conducted as the instrument of data collection within the study. The original language of the interviews is Turkish; however, an English translation is provided for the purpose of catering to the international audience. 788 minutes of data were collected in total throughout the semi-structured interviews, which is equal to 13 hours and 8 minutes of recordings.

The participants were interviewed either face-to-face or virtually online on the Zoom platform. When the interview was held virtually on Zoom, the session was recorded as a video on the researcher's computer for data storage and archiving purposes as well. For each interview, the participants were instructed to read out the question and give their answers thoroughly without interruption primarily answers thoroughly without interruption. The researcher asked follow-up questions to get further details from the participants. Prior to the interviews, all the interviewees were asked to fill in a form of demographic information such as gender, age, level of classes, ownership of digital devices, environment of study, Internet connection, time spent before and after online and face-to-face lessons. Demographic data, however, were not used in the analysis but only used to describe the digital profiles of the participants of the study. The digital profile of students is presented in Table 1 below.

Table 1

Student participants' digital profile

Students	Digital Device	Internet	Work-space	Daily Time Spent on Digital Devices (hour)	Daily Time Spent Online (hour)	Distance Classes (hour)	Face-to-face Classes (hour)	Extra Study (hour)
Student-1	laptop, smart phone	both	personal desk	7-10	7-10	4	4	1
Student-2	laptop, smart phone	both	personal desk, library	5-7	1-3	4	4	1
Student-3	laptop, smart phone	Wireless	personal desk	5-7	3-5	5	4	1
Student-4	laptop, smart phone	both	study room	5-7	5-7	4	4	1
Student-5	laptop, tablet, smart phone	both	personal desk	5-7	3-5	4	4	1
Student-6	laptop, smart phone	both	personal desk	7-10	7-10	4	4	0
Student-7	laptop, smart phone	both	personal desk	7-10	5-7	4	4	2
Student-8	laptop, tablet, smart phone	both	personal desk	5-7	5-7	4	4	2
Student-9	laptop, smart phone	both	personal desk, library	5-7	5-7	4	4	3
Student-10	laptop, tablet, smart phone	both	personal desk, study room	7-10	7-10	4	4	2
Student-11	desktop laptop, tablet, smart phone	both	portable desk	10+	7-10	4	4	0
Student-12	laptop, smart phone	both	personal desk,	5-7	5-7	4	4	3

			study room					
Student-13	laptop, smart phone	both	personal desk, library	5-7	5-7	4	4	1
Student-14	laptop, tablet, smart phone	both	personal desk, study room	3-5	3-5	4	4	2
Student-15	laptop, tablet, smart phone	both	personal desk, study room	7-10	7-10	4	4	2
Student-16	laptop, tablet, smart phone	both	personal desk, study room	5-7	5-7	4	4	2
Student-17	laptop, smart phone	both	personal desk	5-7	5-7	4	4	2
Student-18	laptop, smart phone	both	personal desk, mobile	5-7	5-7	4	4	1
Student-19	laptop, smart phone	Wireless	personal desk	7-10	5-7	4	4	1
Student-20	laptop, smart phone	both	mobile	7-10	7-10	4	4	1

Data analysis

The qualitative data obtained from semi-structured interviews were transcribed, organized, and analyzed using the systematic procedures recommended by Corbin and Strauss (1990), based on the assumptions incurred during and after the data collection phase. An inductive thematic analysis approach was utilized to determine the themes that occurred in the qualitative data. To achieve this, Braun and Clarke's (2006) six-step procedure was followed. This involved re-reading the texts and generating preliminary annotations to establish a level of familiarity with the data; employing descriptive phrases to code, categorizing and organizing the data using the Microsoft (MS) Word and Excel software applications, resulting in the emergence of comprehensive and explanatory academic themes; and ensuring the accuracy and suitability of the themes

for representing the collected data. During the procedure, the qualitative data were also analyzed via the Atlas.ti Qualitative Data Analysis Software web version on web.atlasti.com. For this, the transcribed data were uploaded to the software to better organize the data and identify codes and themes.

Results

Students' Perceptions of Digital Competences

Analyses of the data from the responses to the first research question that explored students' perceptions of digital competences produced three themes: 1) Skills for digitalization, 2) ownership of digital tools, and 3) positive attitudes towards digital competences in language education. The themes yielded through the analyses are presented in Table 2 below:

Table 2

Themes, Sub-Themes and Codes

Themes	Sub-Themes and Codes
Skills for digitalization	Different dimensions of information in the digital era Digital learning Access to information Production of new data Emotive responses to technology
Ownership of digital tools	Ownership of digital devices Number and variety of digital tools and devices High-quality digital devices
Positive attitudes towards digital competences in language education	Positive attitudes in general Opportunities for practising the target language Online digital tools and platforms Completion of tasks and assignments more practical Digital/virtual activities through distance education Higher potential grades thanks to digital competences
Students' Needs for Digital Competence in Distance Education	Tools and devices asked to use by the school Assessment Communication and interaction Access to resources and information Effective online lessons Teachers' digital competences
Differences between before and after distance education in terms of students' digital competences	More digital competent Personal development efforts The use of digital tools and devices

Skills for digitalization

The students focused on concepts like digital learning, performing any skills effectively on digital devices, access to information, production of new data and emotive responses to technology. Most students did not mention language learning processes, but they argued that how effectively one can apply the subject they are competent in into a digital environment would reflect their digital competences. More strikingly, several students approached the skills for digitalization to a broader extent merging the terms of knowledge and the use of technology. For example, Student-15 said, "*Digital competence is knowing what we should do and where, or what we should download from where and how we should use it*". Student 10 paid more attention to the digitalization of teaching and learning environments by saying, "Normally, *we can be good students in a face-to-face class, but the ability to attend classes online and participate in classes digitally is also important*". Students managed to give a more comprehensive definition of the term digital competences when they had a broader perspective, focusing on different dimensions of information in the digital era. For example, Student-13's definition was as follows: "*I can say that digital competence is all the knowledge, skills and attitudes that people use in the process of accessing, understanding and using information that is different in various digital environments, my teacher*".

Ownership of digital tools. A large number of students held the idea that digital competences are solely comprised of the ownership of digital devices despite the detailed questions trying to lead the participants into the right track. Although several students referred to device ownership only as a pre-requisite towards digital competences, there were some who highlighted that owning as many and higher-quality digital devices as possible would mean a higher level of digital competences. For instance, Student-9 reported that "*digital competences are digital objects that people have*" and Student-18 said that "*digital competence requires owning, accessing and using digital devices, as well as the ability to use them effectively*". On the other hand, Student-20 highlighted that owning digital devices would not be enough to have digital competences by exemplifying: "*I mean, I have a good computer, but because I don't know how to use Word, I went to the Internet Cafe for example, I uploaded my writing*

homework from there. That's why sometimes having technology doesn't mean much on its own".

Positive attitudes towards digital competences in language learning. Students had explicitly positive perspectives towards digital competences. Student-8, for instance, stated that "*I think we must have digital competences to increase the dimension of language exposure*". Similarly, Student-2 related exposure to the use of digital devices and said: "*So, I try to be exposed to English as much as possible, whether it's on my phone, on my computer, or whatever I do, I'm trying to get exposure*". Few students underlined the significance of digital competences, referring to opportunities for practicing the target language. Student-9 verbalized what she experienced as follows:

> I made a lot of mistakes in my writings in the first semester. Now, I write very well because I watched videos all the time. I was constantly looking at other people's academic papers that were on the same level as me, so without my digital skills, I would probably be wandering around from teacher to teacher to ask for help for writing.

Student-20 gave a similar example of the use of online digital tools to practice language: "*We sign up for some online apps to talk, listen or practice and learn, and all this requires a lot of digital competence*".

As far as it was observed in the data, the students had positive perspectives towards digital competences also because of higher potential grades in courses thanks to these competences. In fact, they were not directly linked to higher grades, but indirectly leading to better performance by facilitating and making the completion of tasks and assignments more practical. In that context, student-14 stated that "*I think the person with better digital competence will do their homework faster and reach their goal faster. I think it will be such a performance increase, of course it's more practical*". Additionally, Student-3 talked about her experience with low grades and associated her better grades to digital activities through distance education. The excerpt from the interview demonstrates her positive perspectives towards digital competences: "*My grades last semester were quite bad. It got better thanks to digital studies in the distance education process*".

Students' Needs for Digital Competence in Distance Education.

In response to the second research question which explored the areas which students need digital competences in distance education, the analyses revealed two themes: 1) Needs related to assessment, communication, interaction, resources, information, lessons and teachers and 2) differences between before and after distance education in terms of students' digital competences.

Needs related to assessment, communication, interaction, resources, information, lessons and teachers. Students referred to the needs for digital competences demanded by the school while using the relevant tools and devices. For example, Student-8 replied to the interview question with the following utterance in her own words: "*Some applications that the school wants us to use, some websites, office programs, computer and so on*". Student-4 and Student-7, respectively, mentioned other specific tools and skills as follows:

"For example, my teachers share some things in class, for example, I do not know them very well, I have difficulties there". For example, you open something called Padlet, enter something there, and write something. I felt quite lacking in those matters"

"For example, we use Word when we write writing assignments. We do not need to know advanced skills, but sometimes it is necessary to know Word well".

As stressed by Student-8 and Student-12, there are several components of assessment and evaluation conducted online or with heavy use of digital tools that requires high level of digital competences. Student-15 and Student-17 respectively elaborated on this issue in their own words as follows: "*Especially for exams and portfolio, I need the Internet, computer and phone. Because the exams are taken on two devices, you need to have two devices. I need good Internet. I need the computer to be fast because when it is slow, sometimes conversations slip or I can't log in to sites*", and "*I needed a lot of digital skills when I was taking my classes and doing research about the course, even while I was taking my regular exams in distance education*". Access to information was worded by Student-13 in her own words as follows:

I need digital competences in the field of access to information. Accessing information in distance education is very important for everyone, because when you have a teacher face-to-face, the teacher can transfer to you, but you need various devices in various fields to access that information during periods when the teacher is in front of you virtually. The most important of these devices is the Internet. Thanks

to the Internet, you can access information online. The Internet is a much-needed tool for us in distance education.

Differences between before and after distance education in terms of students' digital competences. The theme that there are obvious differences between before and after distance education in terms of students' digital competences has been observed as the most common view among students. One of the best references to that attitude is worded by Student-3 in her own words as follows: "*There is a positive difference in terms of digital competences before and after distance education, I think it has improved.*" Similarly, Student-7 shortly disclosed her opinion as "*I think distance education has definitely increased them.*", while Student-4 further particularized her argument by saying that "*I think there is a big difference now. It will likely increase even more. This will come to a point even more, but now it has its positive aspects*".

Digital tools and devices were the predominant aspects of the theme with a lot of references to devices such as laptop computers, cameras, microphones, smartphones, and applications like Zoom, Teams, Word and AI tools. In this respect, Student-16 expressed his point of view in detail as follows:

For example, I did not know Zoom, I did not even know anything about Microsoft Teams or something. For example, I figured out Zoom a little more after distance education. I feel more comfortable now. Zoom was a system so complicated. The first time I saw it in was distance education, you know, when I first entered digital, I felt like "What is happening!?", I got nervous sometimes with microphone, camera or others. I did not know, I did not have the competence, I did not have the ability before distance education.

Student-19 who highlighted the tools he can use effectively shared his argument in his own words as: "*Now, digital competence on the Internet is much higher, and I can use many things such as grammar sites, Chat GPT much more effectively than before. I have taught myself how to use them correctly during distance education*".

Discussion

Through the analyses of interview questions, the major findings of the study regarding the first research question focusing on EFL students' perceptions of digital competences included several conclusions due to the dimensions of the topic. First, university

students believe that digital competences are highly essential in foreign language education. The participants conceptualized digital competences as encompassing several key elements. The themes included the ownership of digital devices, possessing digital skills, and maintaining a positive perception towards digitalization.

There is existing literature that contains a large body of research which indirectly corroborates the conclusion about the interpretation of digital competences (Ahmed & Roche, 2021; Wong et al., 2015; Yustika & Iswati, 2020). In addition, Meniado (2023) stated that new digital applications encountered in online language learning environments make students happy, attract students' attention and increase their motivation. To specify on a recent study conducted on a similar profile of samples, Akman (2021) examined the relationships between digital literacy, online learning and academic willingness according to the views of undergraduate university students, and as a result of the study, it was determined that students' attitudes towards the concept of digital literacy were positive, and this was an important variable that had an impact on students' academic willingness. Moreover, university students, most of whom are in generation Z, were found to be sufficient in defining, learning, applying and acknowledging ICT skills. It has been determined that a positive attitude has developed towards digital learning environments, which have become widespread especially during the pandemic, rather than traditional teaching approaches. In other studies which were conducted with Gazi University and Fırat University students in Türkiye, the digital literacy levels of the students were examined, and it was concluded that the level of their digital competences was high, and their perceptions were positive (Doğan, 2020; Kozan & Bulut Özek, 2019). In these studies, sub-themes such as accessing information about the skills that participants should have regarding digital literacy awareness, using information, transferring data, checking the accuracy of information, being interested, being conscious, and being able to communicate in digital environments were reached. It has been concluded that university students have a decent awareness of the digital competences they need to be digitally literate.

Digital technologies assume a progressively significant role in contemporary society, and as a result, digital competence has been a subject of debate about its nomenclature. Some refer to it as Internet skills, while others prefer the terms computer

literacy or digital literacy (Janssen et al., 2013), yet the significance of digital competences has been extensively acknowledged and emphasized within educational environments by both university teachers and students (Cook, 2023; López-Meneses et al., 2020). Similarly, the research done by Kayaduman and Battal (2020) revealed a significant favorable association between students' digital literacy abilities and their attitudes towards distance education. Their conclusion was parallel to themes that emerged in our data analysis.

As for the results related to the second research question, studies examining the digital literacy status of university students support the results of this research study. For instance, Onursoy (2018) investigated the digital literacy levels of university students. The results showed that although students' use of technology and their digital literacy levels are parallel, their digital literacy levels lag behind. It can be concluded that university students, who are called digital natives, may not have the ability to process information resources at tertiary level. Due to the fact that university students are introduced to the digital world and technological tools at an early age, digital literacy levels can be high in studies using different study groups and different digital literacy scales. Regarding this situation, in the study conducted by Uyar (2021), in which the digital literacy levels of the students studying at the vocational school were examined, it was observed that the digital literacy of the students was at a high level.

There seems to be more consistent literature published internationally in discussion of the findings for this research question. According to the research done by Alakrash and Abdul Razak (2021) in Malaysia, EFL students predominantly employed digital technologies to enhance their vocabulary acquisition. The rationale for these findings could lie in Education 4.0, which entails the integration of technology in educational practices. This approach necessitates that both educators and learners embrace digital tools to remain abreast of contemporary teaching methodologies and learning modalities (Hodges et al., 2020). Furthermore, due to the shutdown of schools as a preventive measure against the worldwide transmission of COVID-19, educators and students were compelled to use digital technology for online learning. The use of digital technology in distance education, including language learning, seems to have led to a significant advancement in digital competences, which was actually a justification

stated by the participants of this study. Nevertheless, the outcomes pertaining to students' digital literacy seem to contradict most of the findings presented in the literature review. Numerous studies have consistently shown a notable deficiency in digital literacy skills among students studying EFL. According to Supratman and Wahyudin (2017), despite being digital natives, contemporary EFL students continue to exhibit deficiencies in digital knowledge and abilities. The findings suggest that contemporary students in school-age brackets do not possess a higher level of technological proficiency compared to their educators. The earlier research that categorized university students as digital natives was shown to be invalid in recent studies, particularly in the context of the COVID-19 pandemic (Sánchez-Cruzado et al., 2021).

Conclusion

In the current study, in which the data were analyzed using qualitative methods, specific findings were obtained, most of which overlap with the existing literature. Based on the grounded theory, when the data were collected and analyzed, the participants expressed their perceptions of digital competences in a way that highlighted the significant elements in universal definitions that emerged as codes and categories in the analyses. The students were found to have the skills to avoid great difficulties while learning a foreign language whether through distance education or face-to-face. They were observed to be aware of the advantages of using digital tools and contents while learning English, as well as identifying the digital competences they would need.

Taking all the findings into consideration, it has been concluded that tertiary-level EFL learners have positive views of digital competences that cover widely accepted definitions and perceive their own digital competence levels as sufficient, teachers are perceived as having more digital competence than students. Digital competences are widely used in lessons, extracurricular activities, and assessment-evaluation processes, even though school curricula do not sufficiently prioritise them. They also believe that they need similar digital competences in foreign language education, which is parallel to literature. Although it has been shown that the school gives students enough opportunity to enhance their digital competences, there are still

several suggestions made by the participants to advance their academic and professional goals. Furthermore, it is thought that national higher education policies do not place enough emphasis on this issue.

Based on these conclusions, it is recommended that digital competences at higher education level should be prioritised in accordance with the suggestions made by national policymakers, institution administrators, and university instructors but most of all, the university students learning English as a foreign language to pursue their education.

Limitations, Implications, and Recommendations

The study has several limitations. First of all, the findings of this research are based on qualitative analyses. However, different scales and assessment tools can be used to measure digital competences in a real sense, and more comprehensive results can be obtained by examining the quantitative data together with the qualitative data. Secondly, this study was carried out at only one university. Studies can be conducted with participants from different universities, and research that includes comparisons between participant groups can be carried out so that discrepancies in the significance attributed to digital competences in ELT and their incorporation into language education.

An important implication of the study is that practical courses on the use of digital tools can be added to the compulsory curriculum for university students studying in all departments to use in their higher education endeavours, in all areas of their lives, and in their future professional lives. A second implication derives from the finding that distance education increased the students' digital competences. New and process-appropriate distance education models should be developed, and digital competences should be integrated into curricula and updated in accordance with distance education. In addition, the use of additional communication applications should be encouraged to strengthen learner-teacher communication not only during distance but also in face-to-face education. A third implication stems from the finding that the resources the students used are very sensitive to cyberbullying. This being the case, seminars and trainings in which students are taught how to safely search, access, edit and share information can be provided to raise awareness about digital data security.

Ethics Committee Permission Information

Ethics committee approval from the university (Approval number: 2023/01-17) was obtained before data collection.

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