

Investigating the Digital Citizenship Levels of ELT Students within the Scope of Remote Learning

Müfit Şenel

Ondokuz Mayıs University, Turkey

mufitsnl@gmail.com

Abstract

It is obvious that using the Internet and technological tools became a 'must' throughout the Covid-19 pandemic period. All students and teachers started to use all those tools intensively both in their lessons and at their homes, and this process led to the digitalization of the classrooms and courses. Therefore, information and communication technologies (ICTs) and remote learning spread to all aspects of our lives and led to the emergence of a new concept, namely 'Digital Citizenship', making it significant to comprehend where students' digital competence levels are. In line with this, the objective of this research was to investigate the digital citizenship levels of the participants and how much they are knowledgeable about being conscious digital citizens. Totally, 196 students from an ELT department of a state university in Turkey participated in the study. The study was carried out with a quantitative research method in the 2021-2022 spring semester, and data were collected through the 5-point Likert type "Digital Citizenship Scale". Responses were evaluated by SPSS v26 statistical package program and based on the findings, it was indicated that almost all dimensions of digital citizenship were met by the participants. Since there was almost no statistically significant in terms of gender, age, and grade variables, the highest dimensions were found at digital commerce and digital responsibility levels. This current study will pay the way for educators, instructors, curriculum designers, and materials developers to review, redesign and reevaluate the existing language teaching programs. Students will also be aware of their weaknesses and strengths about digital citizenship and realize the significance of the concept of digital citizenship.

Keywords: ELT, digital citizenship, remote learning,

1. INTRODUCTION

When the Covid-19 pandemic broke out, like most people in the world, students, instructors, and education institutions swiftly transferred to online teaching and learning not to disrupt education. This rapid transfer to the use of technological tools and the Internet brought a new paradigm to human beings' life and along with this new paradigm, the way people think, behave, interact, etc. changed. To this end, anyone with a sense of responsibility, uses the technology and the digital tools efficiently, correctly and safely, and respects ethical rules and individual rights on digital platforms can be called a 'digital citizen' (Mossberger, Tolbert, & McNeal, 2008).

In this scope, the ability of people in using the Internet and technological tools is named 'digital citizenship'. The term 'digital citizenship' was defined by several scholars throughout the years and they explained the concept of digital citizenship, its implications, merits and influence on societies, the role of the people, etc. (e.g. (Arif, 2016; Gorman, 2015; Ortega-Gabriel, 2015; Sanabria & Cepeda, 2016; Sullivan, 2016; Şimşek & Şimşek, 2013; Waikato, cited in Gorman, 2015). Digital citizenship was also defined as "teaching of appropriate technological behavior and responsibly when using the technology, or it can be said as a concept that can help people decide right or wrong practice of technology use" (Subiyantoro, et al, 2013, p.53).

However, one of the striking and detailed definitions was given by Ribble and Bailey (2005) as the proper use of technology to gain academic and societal advantages. While they were describing digital citizenship as the norms of appropriate and responsible behavior with regard to technology use in their book *"Digital Citizenship in Schools"* (2007), they defined nine elements of digital citizenship related to the use of technology in and outside the schools (pp. 13-16). The first element was 'digital access', which emphasized that to access technology and afford an Internet connection, buy a computer or any technological tool was not easy for everyone. Secondly, 'digital commerce' means that buying and selling of goods online. The exchange of information electronically was declared as 'digital communication'. 'Digital literacy' which was the fourth element of digital citizenship was described as the ability to use technology and knowing when and how to use it. The fifth element clarified the standards of conduct expected by other digital technology users, namely 'digital etiquette'. Digital law, the sixth element, put forward the legal rights and restrictions governing technology use. The seventh one, namely 'digital rights and responsibilities', explained the importance of the privileges and freedom extended to all digital technology users, and the behavioral expectations which came with them. 'Digital health and wellness' was the eighth element that reflected the role of the elements of physical and psychological well-being related to digital technology use. Finally, the measures that all technology users had to take to guarantee their personal safety and security of their network was called 'digital security'.

Along with these explanations, it can be concluded that digital citizenship has become an essential need of all people from different areas, including the education area, who want to be a part of the digital era and do not want to be unaware of all technological developments. Especially, as a result of the Covid-19 pandemic, digitalization and digital citizenship gained more importance with the implementation of online learning. In this regard, when the relevant literature was examined, no similar or the same study was found which investigated the digital citizenship skills of ELT students during the remote learning period through the perspectives of nine elements of digital citizenship in the Turkish context. Therefore, the main concern of this study was to investigate the knowledge and how well some ELT students majoring at a state university in Turkey practiced the nine elements of digital citizenship within the scope of the remote learning process. Based on those thoughts, it is expected that this study will fill in the gap in the literature by implementing new insights into foundational knowledge that can be used to improve and develop language policies. In this context, this study seeks to find answers to the following research questions:

1. Is there any relationship between the daily use of the Internet, frequently used device(s), and social media account(s) of the ELT students and their digital citizenship?

2. To what extent do ELT students competent enough in the nine elements of digital citizenship?
3. Are there any differences in ELT students' digital citizenship levels according to their demographic characteristics (age, gender, and grades)?

2. LITERATURE REVIEW

Regarding the relevant studies about digital citizenship, it was found that most of the research dealt with the introduction of the concept and the elements of digital citizenship or the perceptions of students and teachers (e.g. Alberta Education, 2012; Choi, 2016; Çubukçu & Bayzan, 2013; Government of Newfoundland and Labrador Education, 2013; Impero Software & Digital Citizenship Institute, 2016; ISTE, 2016; Karakuş Yılmaz, 2020; Ribble, 2008, 2011; Ribble & Bailey, 2007; Sağiroğlu, Bülbül, Kılıç, & Küçükali, 2020; Walters et al., 2019; Yaman, Yurdakul, & Dönmez, 2020). Of course, there were also other studies conducted to determine the participants' digital citizenship levels and attitudes. The general purposes of those studies were to determine the elementary, secondary, high school and university level students' characteristics related to the elements of digital citizenship (Al-Abdullatif & Gameil, 2020; Al Raqqad, 2020; Çebi & Özdemir, 2019; Çepni et al., 2014; Jwaifell, 2018; İridağ, 2020; Korucu & Totan, 2019; Martin et al., 2020b; Nazik et al., 2020; Öztürk, 2019; Ünal, 2017; Vural, 2016; Yalçınkaya & Cıbaroğlu, 2019). Some others studies aimed to identify the characteristics of educational administrators, teachers or preservice teachers (Akcil et al., 2016; Arcagök, 2020; Aslan, 2016; Ata & Yıldırım, 2019; Aygün, 2019; Aygun & İlhan, 2020; Dedebali & Daşdemir, 2019; Dere & Yavuzay, 2019; Elmalı et al., 2020; Görmez, 2017a; Hollandsworth et al., 2011, 2017; Kabataş, 2019; Kaya & Kaya, 2014; Xu et al., 2019; Yılmaz & Doğusoy, 2020).

Here, a few studies were revealed from the relevant literature. A study conducted by Başarmak, Yakar and Kuş (2019) unearthed that participants at a High School were found to have limited knowledge about rights, responsibilities and ethical skills of digital citizenship. To determine the levels of digital citizenship and social presence of the graduate students at a state university in Turkey, Elçiçek, Erdemci and Karal (2018) piloted a study and they stated that their levels of digital citizenship and social presence did not change in terms of gender. In line with this study, Jabeen and Ahmad's (2021) research showed that teachers were generally aware of the elements of digital citizenship except for digital safety and security. Another study clarified that fundamental elements of digital citizenship were the Internet, technological tools, social media and the responsibility of the users (Naim Rahim & Zare, 2021).

Mohammed Al-Abdullatif and Ali Gameil (2020) emphasized that eight elements of digital citizenship were observed among a significant number of undergraduate students and it was added that the Internet was not a factor that affected the practice of digital citizenship. As revealed by Karimi Alavijeh and Abdollahi (2021), Iranian EFL teachers and students did not have enough knowledge about the needed skills for appropriate and effective presence in technology-enhanced settings. A survey was conducted to determine whether there was a relationship between digital citizenship and digital literacy in the conditions of social crisis, and it occurred that digital literacy during the social crisis was essential for continuing the normal course and digital citizenship contributed to the control of the community (Milenkova & Lendzhova, 2021). On the other hand, according to the study conducted by Abdalrahman AlZebidi and Saleh Alsuhaymi (2021) no statistical differences between students' digital citizenship practices regarding their gender, age, or academic level, but there was a statistical

difference between students' digital citizenship practices attributed to their daily usage of the Internet and electronic devices. In the analysis of the data gathered by Yıldız, Çengel and Alkan (2020) it was reported that university students were aware of the subdimensions of digital citizenship levels. In addition, Sincar (2011) indicated that only a few prospective teachers at the Turkish language Department at a state university in Turkey showed behavior norms such as digital access, digital etiquette, digital commerce, digital rights and responsibilities, digital law, digital health and wellness, and digital security categories. Another research carried out illuminated that students at the Department of Information and Record Management showed positive responses about digital literacy, digital commerce, digital ethics, digital communication, digital access, digital security and digital law (Yalçınkaya & Cibaroğlu, 2019).

3. RESEARCH METHODS

The quantitative research method was applied for this study because it is assumed that this method is useful for gathering numerical data from a particular sampling and particular questions.

3.1 Research Design

Quantitative data were obtained by administering a 5-point Likert type scale with 77 items (strongly disagree: 1, disagree: 2, undecided: 3, agree: 4, strongly agree: 5). The scale was adapted and modified from relevant literature (Abdalrhman AlZebidi & Saleh Alsuhaymi, 2021; Mahadir, Baharudin & Ibrahim, 2021; Mohammed Al-Abdullatif & Ali Gameil, 2020; Salah Ghanem) to be able to adaptable to Turkish context. It consists of mainly two parts: A and B. Part A was to get information about participants and part B had nine subdimensions to assess: SD1) digital access (I1-I5); SD2) digital etiquette (I6-I15); SD3) digital law (I16-I22); SD4) digital commerce (I23-I32); SD5) digital literacy (I33-I41); SD6) digital commerce (I42-I49); SD7) digital responsibility (I50-I59); SD8) digital safety (I60-I71) and SD9) digital health (I72-I77). Positive items were scored from 5 to 1, while the negative ones were scored from 1 to 5. A scale was chosen for this research because it is a reliable and quick method to collect information from multiple participants in an effective and timely manner. A group of scholars (with Ph.D. degrees) from the "Foreign Language Teaching", "Guiding and Psychological Counselling" and "Computer Education and Instructional Technologies" departments was invited to check the validity of the scale and give an opinion on the clarity and suitability of each item to make sure whether it meets the goal it is supposed to measure. Some amendments were made by the experts and regarding their suggestions and comments, necessary adjustments were applied and revised, adapted and modified form of the scale was put into final form. It was piloted with 22 students having similarities to the target group to ensure its validity and reliability. The reliability of the items at nine different subdimensions was calculated and the Cronbach alpha coefficients were found .82, .80, .83, .81, .85, .81, .83, .82, and .83, which reflected a reasonable degree of internal consistency of the scale. Participants were shared the forms in the classroom environment in their free time with the permission of their instructors and they were asked to rate their responses on a 5-point scale among five options (strongly disagree, disagree, undecided, agree, or strongly agree). They were also informed that their responses would only be used for that current study and would not be shared by anyone.

3.2 Participants

2nd, 3rd and 4th grade students majoring at an ELT department of a state university in Turkey took part in this current study. The reason why the 1st grade students were not included in the study was that they did not attend online courses at the university throughout the Covid-19 pandemic. The total number of participants was 196. Their ages ranged from 18-26 (18-20, n=82, 41.8%; 21-23, n= 99, 50.5% and 24-26, n= 14, 7.7%). Out of 196 students, 130 (66.3%) of them were female and 66 (33.7%) were male students. 48 (24.5%) students were from the 2nd grade, 59 (30.1%) students were from the 3rd grade and 89 (45.4%) of them were from the 4th grade.

3.3 Instruments

Quantitative data were obtained by administering a 5-point Likert type scale with 77 items (strongly disagree: 1, disagree: 2, undecided: 3, agree: 4, strongly agree: 5). The scale was adapted and modified from relevant literature (Abdallrhman AlZebidi & Saleh Alsuhaymi, 2021; Mahadir, Baharudin & Ibrahim, 2021; Mohammed Al-Abdullatif & Ali Gameil, 2020; Salah Ghanem) to be able to adaptable to Turkish context. It consists of mainly two parts: A and B. Part A was to get information about participants and part B had nine subdimensions to assess: SD1) digital access (I1-I5); SD2) digital etiquette (I6-I15); SD3) digital law (I16-I22); SD4) digital commerce (I23-I32); SD5) digital literacy (I33-I41); SD6) digital commerce (I42-I49); SD7) digital responsibility (I50-I59); SD8) digital safety (I60-I71) and SD9) digital health (I72-I77). Positive items were scored from 5 to 1, while the negative ones were scored from 1 to 5. A scale was chosen for this research because it is a reliable and quick method to collect information from multiple participants in an effective and timely manner. A group of scholars (with Ph.D. degrees) from the “Foreign Language Teaching”, “Guiding and Psychological Counselling” and “Computer Education and Instructional Technologies” departments was invited to check the validity of the scale and give an opinion on the clarity and suitability of each item to make sure whether it meets the goal it is supposed to measure. Some amendments were made by the experts and regarding their suggestions and comments, necessary adjustments were applied and revised, adapted and modified form of the scale was put into final form. It was piloted with 22 students having similarities to the target group to ensure its validity and reliability. The reliability of the items at nine different subdimensions was calculated and the Cronbach alpha coefficients were found .82, .80, .83, .81, .85, .81, .83, .82, and .83, which reflected a reasonable degree of internal consistency of the scale. Participants were shared the forms in the classroom environment in their free time with the permission of their instructors and they were asked to rate their responses on a 5-point scale among five options (strongly disagree, disagree, undecided, agree, or strongly agree). They were also informed that their responses would only be used for that current study and would not be shared by anyone.

3.4 Data Analysis

The quantitative research method was utilized. Results were evaluated by SPSS v26 statistical package program. According to the test of normality results, it was found that the data deviated from a normal distribution ($p<.05$); therefore, non-parametric tests were used. Along with this research method, descriptive statistics, frequency analysis, Kruskal Wallis,

and Mann Whitney-U tests were performed to test the relationships between variables and draw conclusions accordingly.

4. RESULTS AND DISCUSSION

The relationship between the daily use of the Internet, frequently used device(s), and social media account(s) of the ELT students and their digital citizenship

The first research question of the study aimed at investigating whether there was a difference between participants' daily use of the Internet, frequently used device(s) to connect to the Internet and social media account(s) and the variables of the study. Results were tabulated and discussed in tables 1, 2, and 3.

Table 1: Participants' relationship between daily use of the Internet, frequently used device(s) to connect to the Internet and social media account(s) and the demographic characteristics of the participants.

	female (n)	male (n)	2 nd grade (n)	3 rd grade (n)	4 th grade (n)	18- 20 (n)	21- 23 (n)	24- 26 (n)
Daily use of the Internet								
Less than 3 hours	12	8	7	5	6	6	11	1
More than 3 hours	53	32	13	34	38	33	50	2
More than 6 hours	65	28	28	20	45	43	38	12
Frequently used device								
Mobile phone	107	53	37	47	78	71	79	10
Laptop	19	7	7	9	10	9	13	4
PC	4	6	4	3	3	2	7	1
Social media account								
Only WhatsApp	3	----	1	2	----	----	2	1
WhatsApp and Instagram	37	16	10	19	24	23	26	4
WhatsApp and Twitter	42	23	21	21	23	29	33	3
All	48	27	16	17	42	30	38	7
Total	130	66	48	59	89	82	99	15

Investigating the Digital Citizenship Levels of ELT Students

To clarify whether there was a statistically significant difference between their preferences and the gender, grade, and age variables. Kruskal Wallis and Mann Whitney-U tests were held, and the following results were found. When Table 1 was examined, it was observed that the majority of the students used the Internet for more than 6 hours, the most preferred device was their mobile phones and they preferred to use WhatsApp®, Twitter® and Instagram®. Using the Internet for more than 6 hours, of course, was inevitable for students during the online learning period to follow both synchronous and asynchronous courses.

On the other hand, as seen in Table 2, on the other hand, there was no statistically significant difference was observed between their preferences and the two variables (gender and grade). This finding may be attributable to the findings of Yıldız, Çengel and Alkan (2020). Only for the age variable in terms of the daily use of the Internet, a statistically significant difference was found ($p < .05$).

Table 2: Mean Scores of the Participants' Preferences

Daily Use of the Internet									
	SD1	SD2	SD3	SD4	SD5	SD6	SD7	SD8	SD9
Kruskal Wallis H	.526	.566	.193	.444	1.776	5.008	1.713	4.167	1.081
df	2	2	2	2	2	2	2	2	2
Asymp. sig	.769	.753	.908	.801	.411	.082	.425	.124	.583
Social Media Account(s)									
	SD1	SD2	SD3	SD4	SD5	SD6	SD7	SD8	SD9
Kruskal Wallis H	2.964	5.143	5.194	7.460	1.786	7.666	2.350	7.643	11.512
df	3	3	3	3	3	3	3	3	3
Asymp. sig	.397	.162	.158	.059	.618	.053	.503	.054	.009
Frequently Used Device(s)									
	SD1	SD2	SD3	SD4	SD5	SD6	SD7	SD8	SD9
Kruskal Wallis H	3.281	1.002	.819	4.519	1.056	.227	1.820	3.922	3.379
df	2	2	2	2	2	2	2	2	2
Asymp. sig	.194	.606	.538	.148	.822	.997	.644	.557	.192

Table 3: Mean Scores of the Participants according to the Nine Subdimesions

		gender	grade	age
Daily Use of the Internet		.388	.104	.010
The Frequently Used Device	Sig.	.610	.410	.149
Social Media Account		.367	.109	.990

In addition to table 2, to certify whether there was a statistical difference between the mean average scores of the participants regarding the subdimensions of the scale and digital citizenship, table 3 highlighted that only one significant difference was observed at the SD9 (digital health) level (sig.=.009, $p < .05$) in terms of social media accounts of the participants (Table 3).

ELT students' competencies in the nine elements of digital citizenship

The second research question was targeted to investigate and check the knowledge and competencies of the participants on the nine sublevels of digital citizenship. In this context, the mean and standard deviation values of the participants were shared in table 4 below.

Table 4: Average and Standard Deviation Values of Digital Citizenship Scale of ELT Students

		\bar{x}	sd
Subdimension 1: Digital Access			
1	I have no obstacles in getting online whenever I need.	3.65	1.252
2	It is very easy to find valuable information about my interests online.	4.07	.882
3	I don't find any difficulty in downloading any application I want.	3.72	1.225
4	It is easy for me to use the Internet effectively and quickly to find answers to my questions.	4.11	.932
5	I think as a user I know exactly how to access online sources.	4.27	.445
		3.96	.947
Subdimension 2: Digital etiquette			
6	I am keen to present myself online as a polite person.	4.01	.723
7	When disagreeing with others online, I try to be careful to use appropriate vocabulary so as not to bother others.	3.05	.808
8	When I post online, I make sure it's convenient and not embarrassing to others.	4.45	.666
9	When I'm online, I make sure to give everyone equal opportunities to present their views.	4.11	.597
10	When I'm online, I always respect other people's opinions, feelings and cultures.	3.85	.689
11	I never share any videos or photos related to others without their permission.	4.55	.498
12	I don't think I have complete freedom to share any post on my private Instagram page.	2.83	1.537
13	I don't think I have complete commentary freedom to express my objection to other people's posts online.	2.87	1.323
14	I think there is a problem with sending funny comments to my classmates even if they know I'm just kidding.	2.44	1.142
15	Feeling uncomfortable in any online community makes me express my feelings in a very rational way.	3.37	.671
		3.53	.865
Subdimension 3: Digital law			
16	I am fully aware of the relevant Internet regulations and copyright rules.	3.71	.714
17	On my devices, all apps and software are original.	2.81	.755
18	I think there is a problem with using any of the photos that are shared online; therefore, I am careful when I post them on my own page.	4.58	.494
19	I know that sending viruses and spam are digital crimes and so I've never done this.	4.63	.483

Investigating the Digital Citizenship Levels of ELT Students

20	I know hacking and plagiarism are crimes and I have never done those.	4.63	.483
21	I know that downloading music and movies without paying for them is an infringement of copyright and therefore I have never done this.	2.45	.930
22	I am fully aware that stealing someone's identity or impersonating them are digital crimes and therefore I have never practiced this.	4.44	.575
		3.89	.633
Subdimension 4: Digital communication			
23	I am keen to have a lot of people on my WhatsApp., Twitter and Instagram	3.72	1.102
24	Most of my work is done through WhatsApp. and my mobile phone	4.22	.666
25	Compared to direct offline communication, I enjoy communicating more with others online.	4.04	.799
26	I am keen to share my opinions online regarding political and social issues.	2.36	1.144
27	I use the internet to express my feelings by posting photos and videos.	2.30	.969
28	I am keen to comment on other posts that are shared by others.	3.17	1.308
29	I tend to extract the official papers related to me through the official government websites.	2.03	.960
30	I prefer conducting business meetings online.	2.66	.677
31	I motivate others to connect with me on social media.	2.85	.835
32	I've made strong friends with people online without meeting them physically.	2.48	1.152
		2.98	.961
Subdimension 5: Digital literacy			
33	I have no problem using digital devices to achieve my goals.	3.86	.799
34	I think being online increases my knowledge of things.	3.65	1.109
35	I have already had many discussions of social and political matters and other community problems with others online.	2.78	1.020
36	I use social media as an effective way to connect with others.	4.29	.724
37	I think as a user I know exactly how to use a computer and how to rate online resources.	4.04	.756
38	I know very well that a lot of information being published online is not true or accurate.	4.00	.751
39	I believe that improving digital knowledge enhances employment opportunities.	3.93	.716
40	I can edit my personal settings from my social media account.	3.09	.823
41	When I have a problem with digital tools, I can fix this myself.	2.37	.996
		3.55	.854
Subdimension 6: Digital commerce			
42	I prefer ordering products online as I trust online shopping.	3.81	.829
43	Whenever I need to purchase any product, I research it online first.	3.99	.712
44	I do extensive research before purchasing any product from online stores to check all sellers' details and to make sure how secure the website I'm buying from.	4.13	.958
45	When buying online, I pay attention to the total price of the product.	4.30	.863

46	I read all possible reviews about the product before buying it in online stores.	4.44	.786
47	Online commerce saves my time and gives me better prices and options.	4.13	.718
48	I am keen to receive a copy of the purchase transaction when shopping online.	4.55	.498
49	I prefer online shopping as it is easier than going to the market.	3.40	1.020
		4.09	.485
Subdimension 7: Digital responsibility			
50	I know my basic digital rights.	3.35	.994
51	I do not use websites with inappropriate content (racism, bigotry and rudeness).	4.20	.665
52	I use the Internet according to the established rules.	4.04	.799
53	I know that I am responsible for all of my online actions, including online exams.	4.57	.495
54	When I use text and graphics from websites, I make sure to mention where you got them from.	4.00	.810
55	I consider myself a visitor when I'm online.	4.36	.483
56	I never download any audio, videos or software illegally.	3.85	.824
57	I have never posted any online content related to other people's privacy.	3.98	.726
58	I adhere to the rules of ethics regarding the digital world.	3.72	.705
59	When I communicate on the Internet, I know that my freedom is finished where someone else's freedom begins.	4.05	.724
		4.01	.722
Subdimension 8: Digital safety			
60	I believe that sharing my personal data online with others is not secure in all cases.	4.57	.724
61	I think anyone can get my data if I make it available on my computer as long as I'm connected to the internet.	3.07	.495
62	I make sure that the firewall is turned on and antivirus and anti-spyware are installed and up to date on my computer.	4.36	1.017
63	When using Instagram, I think it is inappropriate for me to show all my data.	3.14	.596
64	I never open any untrusted files or messages sent by unknown people therefore I delete messages and emails from the suspicious sender immediately.	4.17	1.256
65	It is not safe to open attached documents even if they are sent by someone I know.	3.76	.758
66	I am keen to protect important data in password-protected files and to backup them to a secure external drive.	3.90	.683
67	I regularly make changes to my passwords to protect my privacy.	3.08	.731
68	I am keen to read the privacy statements before installing any software.	3.90	.766
69	I am fully aware of all potential threats that may harm my digital devices.	3.94	.765
70	When I notice strange changes to my device, I shut it down immediately and take it to the maintenance center.	3.23	.798
71	I do not allow anyone to have access to my personal device and I do not save any information on any public devices.	3.97	1.084

		3.75	.806
Subdimension 9: Digital health			
72	When I'm online, I make sure to keep the screen at an appropriate distance from my eyes.	4.06	.737
73	When I am online, I am careful to maintain a proper sitting position.	3.70	.547
74	I limit my internet use to avoid any physical health problems that can occur from heavy use of technology.	3.18	.960
75	I always make sure not to stay online for long periods of time.	3.36	.974
76	I think I am fully aware of both physical and psychological problems related to the heavy use of technology.	3.88	.970
77	I ensure that lighting on the computer screen and workplace is appropriate to reduce eyestrain.	3.95	.666
		3.68	.809

To interpret the responses of the students in table 1, a cut-off point criterium was used to mention their digital citizenship dimensions at three levels as high (3.67-5.00), moderate (2.34-3.66), and low (1.00-2.33) (Landell, 1997). Participants had mostly high knowledge about 'digital access (\bar{x} =3.96)', 'digital law (\bar{x} =3.89)', 'digital commerce (\bar{x} =4.09)', 'digital responsibility (\bar{x} =4.01)', 'digital safety-privacy (\bar{x} =3.75)' and 'digital health (\bar{x} =3.68)' while they had moderate knowledge only about 'digital etiquette (\bar{x} =3.53)', 'digital communication (\bar{x} =2.98)' and 'digital literacy (\bar{x} =3.55)'. Those findings were in line with that of Mahadir, Baharudin and Ibrahim, (2021); Omar Eid Al-Momani and Alsmadi (2020); Sari, Sapriya and Fitriarsi, (2022). As reflected here, among the nine subdimensions of the scale, the highest average subdimensions were 'digital commerce' (\bar{x} =4.09) and 'digital responsibility' (\bar{x} =4.01). This result aligns with the findings of Mohammed Al-Abdullatif and Ali Gameil (2020). The lingering effect of why the participants had a higher level of digital commerce may be explained as a result of the lockdown process throughout the Covid-19 because it was obvious that most of them had used and preferred online shopping.

Differences in ELT students' digital citizenship levels according to their demographic characteristics (age, gender, and grades)

The third question was selected to seek the emerging effect of the demographic characteristics of the participants regarding their digital citizenship levels. First of all, the grades of the students were taken into consideration and the findings were given in table 5.

Table 5: Participants' Digital Citizen Levels Attributed to Grade Variable

Sub-dimensions	Grade	N	Mean Rank	sd	X^2	p
SD1	2 nd Grade	94	108.01			
	3 rd Grade	76	97.54	2	1.955	.376
	4 th Grade	30	94.01			
SD2	2 nd Grade	94	100.57			
	3 rd Grade	76	99.29	2	.151	.927
	4 th Grade	30	96.86			
SD3	2 nd Grade	94	96.04			
	3 rd Grade	76	95.97	2	.471	.790

	4 th Grade	30	101.50			
SD4	2 nd Grade	94	90.48			
	3 rd Grade	76	89.60	2	5.355	.069
	4 th Grade	30	108.72			
SD5	2 nd Grade	94	103.81			
	3 rd Grade	76	94.18	2	.777	.678
	4 th Grade	30	98.50			
SD6	2 nd Grade	94	112.23			
	3 rd Grade	76	92.84	2	3.827	.148
	4 th Grade	30	94.85			
SD7	2 nd Grade	94	92.95			
	3 rd Grade	76	90.74	2	3.491	.175
	4 th Grade	30	106.64			
SD8	2 nd Grade	94	91.80			
	3 rd Grade	76	103.81	2	1.203	.548
	4 th Grade	30	95.60			
SD9	2 nd Grade	94	89.43			
	3 rd Grade	76	102.97	2	1.732	.421
	4 th Grade	30	100.43			

Table 5 summarizes the mean average scores of the participants taken from the nine subdimensions of the scale according to their grades and it is clear that no statistically significant difference has occurred. (SD1- $X^2=1.955$, $sd=2$, $p=.376$, $p>.05$; SD2- $X^2=.151$, $sd=2$, $p=.927$, $p>.05$; SD3- $X^2=.471$, $sd=2$, $p=.790$, $p>.05$; SD4- $X^2=5.355$, $sd=2$, $p=.069$, $p>.05$; SD5- $X^2=.777$, $sd=2$, $p=.678$, $p>.05$; SD6- $X^2=3.827$, $sd=2$, $p=.148$, $p>.05$; SD7- $X^2=3.491$, $sd=2$, $p=.175$, $p>.05$; SD8- $X^2=1.203$, $sd=2$, $p=.548$, $p>.05$; SD9- $X^2=1.732$, $sd=2$, $p=.421$, $p>.05$).

The findings for the second variable (age) researched under the third research question were listed in table 6 below.

Table 6: Participants' Digital Citizen Levels Attributed to Age Variable

Sub-dimensions	age	N	Mean Rank	S D	X^2	p
SD1	18-20	82	94.73			
	21-23	99	106.38	2	6.976	.031
	24-26	15	67.10			
SD2	18-20	82	107.67			
	21-23	99	91.49	2	3.763	.152
	24-26	15	94.60			
SD3	18-20	82	103.31			
	21-23	99	95.80	2	1.187	.552
	24-26	15	90.03			
SD4	18-20	82	90.30			
	21-23	99	101.95	2	4.383	.112
	24-26	15	120.53			
SD5	18-20	82	92.09			
	21-23	99	102.97	2	1.839	.399
	24-26	15	104.03			

Investigating the Digital Citizenship Levels of ELT Students

SD6	18-20	82	96.38	2	.836	.658
	21-23	99	98.38			
	24-26	15	110.83			
SD7	18-20	82	104.73	2	3.241	.198
	21-23	99	91.53			
	24-26	15	110.47			
SD8	18-20	82	100.79	2	.848	.654
	21-23	99	98.46			
	24-26	15	86.23			
SD9	18-20	82	102.49	2	1.450	.484
	21-23	99	97.38			
	24-26	15	84.03			

When evaluating the answers of the participants attributed to the age variable, only the first subdimension (digital access) of the scale was found statistically significant ($p < .05$) while the other subdimension were not found significant. This result is consistent with the studies of Mossberger, Tolbert and McNeal (2007). (SD1- $X^2=6.976$, $sd=2$, $p=.031$, **$p < .05$** ; SD2- $X^2=3.763$, $sd=2$, $p=.152$, $p > .05$; SD3- $X^2=1.187$, $sd=2$, $p=.552$, $p > .05$; SD4- $X^2=4.383$, $sd=2$, $p=.112$, $p > .05$; SD5- $X^2=1.839$, $sd=2$, $p=.399$, $p > .05$; SD6- $X^2=.836$, $sd=2$, $p=.658$, $p > .05$; SD7- $X^2=3.241$, $sd=2$, $p=.198$, $p > .05$; SD8- $X^2=.848$, $sd=2$, $p=.654$, $p > .05$; SD9- $X^2=1.450$, $sd=2$, $p=.484$, $p > .05$).

Finally, the evaluation results of the last variable (gender) of the third research question were put forward in table 7.

Table 7: Participants' Digital Citizen Levels Attributed to Gender Variable

Sub-dimensions	Gender	N	Mean Rank	Sum of Ranks	U	p
SD1	Female	130	95.88	12465.00	3950	.361
	Male	66	103.65	6841.00		
SD2	Female	130	107.04	13915.00	3180	.003
	Male	66	81.68	5391.00		
SD3	Female	130	105.72	13744.00	3351	.011
	Male	66	84.27	5562.00		
SD4	Female	130	96.07	12488.50	3973.5	.397
	Male	66	103.30	6817.50		
SD5	Female	130	99.59	12947.00	4148	.703
	Male	66	96.35	6359.00		
SD6	Female	130	103.97	13516.50	3578.5	.056
	Male	66	87.72	5789.50		
SD7	Female	130	98.54	12810.00	4285	.989
	Male	66	98.42	6496.00		
SD8	Female	130	97.78	12711.50	4196.5	.802
	Male	66	99.92	6594.50		
SD9	Female	130	93.58	12165.50	3650.5	.085
	Male	66	108.19	7140.50		
Total		196				

From the data presented in Table 7, it can be concluded that SD2 (digital etiquette, $p=.003$, $p<.05$) and SD3 (digital law, $p=.011$, $p<.05$) have been found significant in favor of female participants among the other subdimensions according to the gender variable. This result comparable with those of studies conveyed by Abdalrham Alzebidi and Saleh Alsuhaymi (2021); İşman and Güngören (2014); Jabeen and Ahmad, (2021). (SD1, $U=3.950$, $p=.361$, $p>.05$; SD2, $U=3.180$, $p=.003$, **$p<.05$** ; SD3, $U=3.351$, $p=.011$, **$p<.05$** ; SD4, $U=3973.5$, $p=.397$, $p>.05$; SD5, $U=4.148$, $p=.703$, $p>.05$; SD6, $U=3578.5$, $p=.056$, $p>.05$; SD7, $U=4.285$, $p=.989$, $p>.05$; SD8, $U=4196.5$, $p=.802$, $p>.05$; SD9, $U=3650.5$, $p=.085$, $p>.05$).

6. CONCLUSION

This study set out to shine a light on the ELT students' knowledge and awareness of the nine elements of digital citizenship. When the average mean scores of the participants were calculated, it was found that they had a generally high level of digital citizenship. Among the nine elements of scale, their digital commerce and digital responsibilities were found a bit higher than the other elements. Since all students had continued online learning throughout their university education, they had got accustomed to basic features and principles of digitalism, sometimes consciously and sometimes unconsciously. When their responses were compared according to their ages, in terms of digital access (SD1), students had a statistically significant level. Another variable, gender, was taken into consideration to shed light on the evaluation of female and male students' digital citizenship levels from the point of nine subdimensions, and digital etiquette (SD2) and digital law (SD3) were found statistically different in favor of female students. It is because female students are more respectful of the rights of other people and more attentive to obeying the rules rather than males.

The results of this research have some implications. For example, enable them to practice the elements of digital citizenship and benefit to criticize and evaluate their current knowledge and abilities about digital citizenship levels in order to improve themselves. It is also hoped that this study encourages researchers and policymakers to explore cultural, social, psychological, political, educational and traditional facets of digital citizenship in the Turkish context because if the digital citizenship concept is thought to be implemented into the Turkish education system, it should be redefined according to the traditional norms and expectations of Turkish ELT students. This study is not without its limitations, of course. For instance, this study was conducted by the participation of only ELT students at a state university in Turkey. Therefore, it is recommended for further studies that students from other foreign languages departments may be included in the studies. On the one hand, not only state universities but also private universities in Turkey will be needed to be involved in future studies. Another limitation may be accepted to the use of a scale to determine the digital citizenship levels of the students. For that reason, an interview with the participants may be done to eliminate the subjectivity of the studies. It is also important to delve into other variables such as socioeconomic status, academic success, educational backgrounds of the participants, etc. may be compared and contrasted with their digital citizenship levels.

REFERENCES

- Abdalrham AlZebidi, A., & Saleh Alsuhaymi, D. (2021). Investigating students' digital citizenship practices for undergraduate students at Al-Qunfudhah University College.

- Akcil, U., Altinay, Z., & Altinay, F. (2016). Assessing the effects of managers in the digital age on the management process of digital citizenship roles. *The Anthropologist*, 23(1-2), 209-217. <https://dx.doi.org/10.1080/09720073.2016.11891943>.
- Al-Abdullatif, A. M., & Gameil, A. A. (2020). Exploring students' knowledge and practice of digital citizenship in higher education. *International Journal of Emerging Technologies in Learning (IJET)*, 15(19), 122-142. <https://dx.doi.org/10.3991/ijet.v15i19.15611>
- Alberta Education (2012). *Alberta education cataloging in publication data, digital citizenship policy development guide*. Alberta: School Technology Branch. Retrieved from <https://education.alberta.ca/media/3227621/digital-citizenship-policy-development-guide.pdf>
- Al Raqqad, H. K. (2020). The impact of social networking on enhancing digital citizenship among Princess Alia College, Al- Balqa'a University students. *Journal of Educational and Social Research*, 10(5), 53-65. <https://dx.doi.org/10.36941/jesr-2020-0087>
- Arcagök, S. (2020). Investigation on teachers' perceptions of digital citizenship. *Van Yüzüncü Yıl University Journal of Education*, 17(1), 534-556. Retrieved from <https://dergipark.org.tr/tr/pub/yyuefd/issue/51176/693832>
- Arif, R. (2016). Internet as a hope or a hoax for emerging democracies: Revisiting the concept of citizenship in the digital age. *Procedia-Social and Behavioral Sciences*, (236), 4-8.
- Aslan, S. (2016). *İlköğretim sosyal bilgiler öğretmen adaylarının dijital vatandaşlık davranışlarının bazı değişkenler açısından incelenmesi (Fırat, Dicle, Siirt, Adıyaman Üniversiteleri örneği) Digital citizenship behaviour of social studies teachers of primary investigation of some variables (The sample of Fırat, Dicle, Siirt, Adıyaman Universities) (Master's thesis)*. Fırat University, Elazığ, Turkey.
- Ata, R., & Yıldırım, K. (2019). Turkish pre-service teachers' perceptions of digital citizenship in education programs. *Journal of Information Technology Education: Research*, 18, 419-438. <https://dx.doi.org/10.28945/4392>
- Aygün, M. (2019). *Sosyal bilgiler öğretmenlerinin ve sosyal bilgiler öğretmen adaylarının dijital vatandaşlık durumlarının incelenmesi (Examination of in-service and pre-service social studies teachers' digital citizenship) (Master's thesis)*. Yıldız Teknik University, İstanbul, Turkey.
- Aygun, M., & İlhan, G. O. (2020). Analysis of in-service and pre-service social studies teachers' digital citizenship. *International Online Journal of Educational Sciences*, 12(4), 123-146. <https://dx.doi.org/10.15345/iojes.2020.04.009>
- Başarmak, U., Yakar, H., & Kuş, Z. (2019). Analysis of digital citizenship subject contents of secondary education curricula. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 10(1), 26-51.

- Choi, M. (2016) A concept analysis of digital citizenship for democratic citizenship education in the internet age. *Theory & Research in Social Education*, 44(4), 565-607. <https://dx.doi.org/10.1080/00933104.2016.1210549>
- Çebi, A., & Özdemir, T. B. (2019). The role of digital nativity and digital citizenship in predicting high school students' online information searching strategies. *Education and Science*, 200(44), 47- 57. <https://dx.doi.org/10.15390/EB.2019.8379>
- Çepni, O., Oğuz, S., & Kıcan, B. (2014). Primary school students' views of digital citizenship. *The Journal of Turkish Social Research*, 18(3), 251-266. Retrieved from <https://dergipark.org.tr/tr/pub/tsadergisi/issue/21495/230453>
- Çubukçu, A., & Bayzan, Ş. (2013). Perception of digital citizenship in Turkey and methods of increasing this perception by using the internet conscious, safe and effective. *Middle Eastern & African Journal of Educational Research*, 5, 148-174. Retrieved from <https://www.guvenliweb.org.tr/dosya/WRQDG.pdf>
- Dedebali, N. C., & Daşdemir, İ. (2019). Social studies teacher candidates' perception of digital citizenship. *International Journal of Educational Methodology*, 5(3), 465-477. <https://dx.doi.org/10.12973/ijem.5.3.465>
- Dere, İ., & Yavuzay, M. (2019). Examination of prospective social studies teachers through digital citizenship indicators. *MANAS Journal of Social Studies*, 8(3), 2400-2414. <https://dx.doi.org/10.33206/mjss.537592>
- Elçiçek, M., Erdemci, H., & Karal, H. (2018). Examining the relationship between the levels of digital citizenship and social presence for the graduate students having online education. *Turkish Online Journal of Distance Education*. 19(1), 203-214.
- Elmalı, F., Tekin, A., & Polat, E. (2020). A study on digital citizenship: Preschool teacher candidates vs. computer education and instructional technology teacher candidates. *Turkish Online Journal of Distance Education*, 21(4), 251-269. <https://dx.doi.org/10.17718/tojde.803423>
- Emejulu, A., & McGregor, C. (2019). Towards radical digital citizenship in digital education. *Critical Studies in Education*. 60, 131-147. <https://dx.doi.org/10.1080/17508487.2016.1234494>
- Gorman, G. (2015). What's missing in the digital world? Access, digital literacy and digital citizenship. *Online Information Review*, 39(2). Recuperado de <https://www.emeraldinsight.com/doi/full/10.1108/OIR-02-2015-0053>
- Government of Newfoundland and Labrador Education (2013). *Teaching digital citizenship*. Retrieved from https://www.gov.nl.ca/education/files/k12_safeandcaring_procedure_5.pdf
- Görgün Baran, O. Hazer, & S. Öztürk (Eds.) *Gençlik ve dijital çağ [Youth and the digital age]* (pp. 124-138). Ankara: Hacettepe University Gençlik Araştırmaları ve Uygulamaları Merkezi.

- Görmez, E. (2017a). The level of the teachers about the "digital citizenship and its subdimensions" (Van city sample). *Academic Sight International Refereed Online Journal*, 60, 52-74. Retrieved from <https://www.akademikbakis.org/file/60.pdf>
- Hollandsworth, R., Dowdy, L., & Donovan, J. (2011). Digital citizenship in K-12: It takes a village. *TechTrends*, 55(4), 37–47. <https://dx.doi.org/10.1007/s11528-011-0510-z>
- Impero Software & Digital Citizenship Institute (2016). *Digital citizenship: A holistic primer*. Digital Citizenship Summit 2016 in San Francisco. Retrieved from <https://www.imperosoftware.com/us/wp-content/uploads/sites/16/2017/03/DigitalCitizenship-AHolistic-Primer-v1.9.2.pdf>
- International Society for Technology in Education-ISTE. (2016). Digital citizenship defined: Teach the 9 elements to enhance students' safety, creativity and empathy. Retrieved from https://cdn2.hubspot.net/hubfs/1818747/Images/Marketing%20Campaigns/Digital%20Citizenship/Digital_Citizenship_Downloadable_10-2016_v11_web.pdf
- İridağ, A. (2020). Young people's perception of digital citizenship. In Ö. Gökkaya, İ. Kılıcaslan, B. Demir, & K. Kahraman (Eds.), *International Marmara Social Sciences Congress (IMASCON 2020 -Autumn) Proceedings Book* (pp.121-133). Kocaeli, Turkey.
- ISTE. (2008). *Advancing digital age teaching*. Retrieved from <http://www.iste.org/docs/pdfs/nets-t-standards.pdf?sfvrsn=2>
- ISTE (2012). *Digital age teaching*. Retrieved from <http://www.iste.org/standards/standards-for-teachers>
- ISTE (2016). *ISTE standards for students*. Retrieved from <https://www.iste.org/standards/for-students>
- İşman, A., & Güngören, O.C. (2014). Being digital citizen. *Procedia-Social and Behavioral Sciences*, 106, 551–556.
- Jabeen, S. S., & Ahmad, F. (2021). Digital citizenship: Effective use of digital media. *Edulearn*. Conference Proceedings. 6041-6048.
- Jwaifell, M. (2018). The proper use of technologies as a digital citizenship indicator: Undergraduate English language students at Al-Hussein Bin Talal University. *World Journal of Education*, 8(3), 86-94. <https://dx.doi.org/10.5430/wje.v8n3p86>
- Kabataş, S. (2019). *Öğretmen adaylarının dijital vatandaşlık algılarının yaşam boyu öğrenme tutumları ve e-öğrenmeye hazır bulunuşluğu açısından değerlendirilmesi [Evaluation of teacher candidates' digital citizenship perceptions in terms of lifelong learning attitudes]* (Master's thesis). Bartın University, Bartın, Turkey.
- Karakuş Yılmaz, T. (2020). Dijital haklar ve sorumluluklar [Digital rights and responsibilities]. In Ş. Sağıroğlu, H. İ. Bülbül, A. Kılıç, & M. Küçükali (Eds.), *Dijital okuryazarlık: Araçlar, metodolojiler, uygulamalar ve öneriler (Digital literacy: Tools, methodologies, practices and recommendations)* (pp. 127-180). Ankara: Nobel Akademik Yayıncılık.

- Karimi Alavijeh, K., & Abdollahi, A. (2021). Awareness and incorporation of digital citizenship by the Iranian EFL learners and teachers. *The Journal of Applied Linguistics and Applied Literature: Dynamics and Advances*. 9(1), 33-63.
- Kaya, A., & Kaya, B. (2014). Teacher candidates' perceptions of digital citizenship. *International Journal of Human Sciences*, 11(2), 346-361.
<https://dx.doi.org/10.14687/ijhs.v11i2.2917>
- Korucu, A. T., & Totan, H. N. (2019). Researching into a course of information technologies and software in the context of digital citizenship through student opinions. *Participatory Educational Research*, 6(1), 84-97.
<https://dx.doi.org/10.17275/per.19.7.6.1>
- Landell, K. (1997). *Management by Menu*. Wiley dan Sons Inc.
- Mahadir, N. B., Baharudin, N. H., & Ibrahim, N. N. (2021). Digital citizenship skills among undergraduate students in Malaysia: A preliminary study. *International Journal of Evaluation and Research in Education (IJERE)*. 10(3), 835-844.
<https://dx.doi.org/10.11591/ijere.v10i3.21277>
- Martin, F., Hunt, B., Wang, C., & Brooks, E. (2020b). Middle school student perception of technology use and digital citizenship practices. *Computers in the Schools*, 37(3), 196-215. <https://dx.doi.org/10.1080/07380569.2020.1795500>
- Milenkova, V., & Lendzhova, V. (2021). Digital citizenship and digital literacy in the conditions of social crisis. *Computers*. 10, 40.
<https://dx.doi.org/10.3390/computers10040040>
- Mohammed Al-Abdullatif, A., & Ali Gameil, A. (2020). Exploring students' knowledge and practice of digital citizenship in Higher Education. *International Journal of Emerging Technologies in Learning*. 15(19), 122-142.
<https://dx.doi.org/10.3991/ijet.v15i19.15611>
- Mossberger, K., Tolbert, C. J., & McNeal, R. S. (2007). *Digital citizenship – The Internet, Society & Participation*. MIT Press.
- Mossberger, K., Tolbert, C.J., & McNeal, R.S. (2008). *Digital citizenship*. MIT Press.
- Naim Rahim, M., & Zare, A. (2021). A critical review of the impacts of digital citizenship on teachers and students' educational development. *International Journal of Multidisciplinary: Applied Business and Education Research*. 2(7), 557-564.
<https://dx.doi.org/10.11594/ijmaber.02.07.03>
- Nazik, M. H., Demirel, H., & Bayraktar, A. (2020). Gençlerin dijital vatandaşlık düzeyleri ile siber zorbalık eğilimleri [Digital citizenship levels of young people and their cyberbullying trends]. In *Gençlik ve Dijital Çağ*, Baran Aylin Görgün, Hazer Oya, Öztürk M. Serhat (Eds). Hacettepe Üniversitesi, Ankara, pp.124-138, 2020
- Omar Eid Al-Momani, M., & Alsmadi, M. (2020). Students' degree of possessing digital citizenship skills from their points of view at Al-Balqa Applied University. *Universal Journal of Educational Research*. 8(8), 3335-3345.
<https://dx.doi.org/10.13189/ujer.2020.080805>

- Ortega-Gabriel, W. (2015). Ciudadanía digital: Entre la novedad del fenómeno y las limitaciones del concepto. *Economía, sociedad y territorio*, 15(49), 835-844.
- Öztürk, C. (2019). *8. sınıf öğrencilerinin dijital vatandaşlık düzeyleri ile siber zorbalık eğilimleri arasındaki ilişki (The investigation of relation between digital citizenship levels and tendencies to cyberbullying of 8th grade students)* (Master's thesis). Sakarya University, Sakarya, Turkey.
- Pangrazio, L., & Sefton-Green, J. (2021). Digital Rights, Digital Citizenship and Digital Literacy: What's the Difference? *J. New Approaches Educ.* 10, 15–27.
- Ribble, M. (2008). Passport to digital citizenship journey toward appropriate technology use at school and at home. *Learning & Leading with Technology*, 36(4), 14-17. Retrieved from <https://files.eric.ed.gov/fulltext/EJ904288.pdf>
- Ribble, M., & Bailey, G. (2007). *Digital citizenship in schools*. Washington: International Society for Technology in Education.
- Ribble, M. (2004). Digital citizenship: Addressing appropriate technology behavior. *Learning & Leading with Technology*, 32(1), 6-11.
- Ribble, M. S. (2006). *Implementing digital citizenship in schools: The research, development and validation of a technology leader's guide* (Unpublished doctoral dissertation). Kansas State University.
- Ribble, M. (2009). Passport to digital citizenship: Journey toward appropriate technology use at school and at home. *Learning & Leading with Technology*, 36(4), 14-17.
- Ribble, M. (2011). Digital citizenship in schools. *International Society for Technology in Education*, 32(4), 34-47.
- Ribble, M. (2012). Digital citizenship for educational change. *Kappa Delta Pi Record*, 48(4), 148-151.
- Ribble, M. (2015). *Digital citizenship in schools: Nine elements all students should know*. International Society for Technology in Education.
- Ribble, M. S., & Bailey, G. D. (2004). Monitoring technology misuse & abuse. *THE Journal*, 32(1), 22-25.
- Ribble, M. S., & Bailey, G. D. (2005). Teaching digital citizenship: When will it become a priority for 21st-century schools? *School Business Affairs*, 71(3), 11-14.
- Ribble, M. S., & Bailey, G. D. (2006). Digital citizenship at all grade levels. *Learning and Leading with Technology*, 33(6), 26.
- Ribble, M. S., & Bailey, G. D. (n.d.). *Do students need a technology driver's license?* Retrieved from <http://twatman.pbworks.com/f/TechDL2.pdf>
- Ribble, M. S., Bailey, G. D., & Ross, T. W. (2004). Digital citizenship: Addressing appropriate technology behavior. *Learning & Leading with Technology*, 32(1), 6-9.

- Ribble, M., & Miller, T. N. (2013). Educational leadership in an online world: Connecting students to technology responsibly, safely, and ethically. *Journal of Asynchronous Learning Networks*, 17(1), 135-143.
- Sağıroğlu, Ş., Bülbül, H. İ., Kılıç, A., & Küçükali, M. (2020). Dijital okuryazarlık ve ötesi [Digital literacy and beyond]. In Ş. Sağıroğlu, H. İ. Bülbül, A. Kılıç, & M. Küçükali (Eds.), *Dijital okuryazarlık: Araçlar, metodolojiler, uygulamalar ve öneriler (Digital literacy: Tools, methodologies, practices and recommendations)* (pp. 2-46). Ankara: Nobel Akademik Yayıncılık.
- Salah Ghanem, M. (2021). Evaluating the digital citizenship level (An applied study on hotel employees in Alexandria). *Journal of Association of Arab Universities for Tourism and Hospitality (JAAUTH)*, 21(5), 193-217.
- Sanabria, A. & Cepeda, O. (2016). La educación para la competencia digital en los centros escolares: la ciudadanía digital/Education for digital competence in schools: digital citizenship. *Revista Latinoamericana de Tecnología Educativa-RELATEC*, 15(2), 95-112.
- Saputra, M., & Siddiq, I. H. A. (2020). Social Media and Digital Citizenship: The Urgency of Digital Literacy in the Middle of a Disrupted Society Era. *Journal of Emerging Technologies in Learning (IJET)*, 15(7), 156-161.
<https://dx.doi.org/10.3991/ijet.v15i07.13239>
- Sari, D. P., Sapriya, S., & Fitriarsi, S. (2022). Analysis of students' digital citizenship practices on distance learning activities during pandemic Covid-19. *Proceedings of the Annual Civic Education Conference (ACEC 2021)*. 507-513,
<https://doi.org/10.2991/assehr.k.220108.091>
- Sincar, M. (2011). An analysis of prospective teachers' digital citizenship behavior norms. *International Journal of Cyber Ethics in Education*, 1(2), 25-40.
<https://dx.doi.org/10.4018/ijcee.2011040103>
- Subiantoro, E., Cahya Nugraha, H., Kusuma Ratih, C., & Rhesky Nosyrafil, R. (2013). *Simulasi Digital Jilid 1*. Jakarta: Kementerian Pendidikan & Kebudayaan. In B. Djokosumbogo Karyana & M. Iqbal (Eds.). *Buku Siswa SMK/MAK Kelas X Mata Pelajaran Simulasi Digital Semester 1*.
- Sullivan, C. (2016). Digital citizenship and the right to digital identity under international law. *Computer Law & Security Review*, 32(3), 474-481.
- Şimşek, E., & Şimşek, A. (2013). New literacies for digital citizenship. *Contemporary Educational Technology*, 4(2), 126-137.
- Ünal, D. P. (2017). Digital citizenship elements in a curriculum and secondary school students' states of having digital citizenship elements. *Karaelmas Journal of Educational Sciences*, 5(2), 180-195. Retrieved from
<http://ebd.beun.edu.tr/index.php/KEBD/article/viewFile/119/155>
- Vural, S. S. (2016). *Üniversite öğrencilerinin bakış açısıyla dijital vatandaşlık göstergelerinin incelenmesi (Investigation of digital citizenship indicators through*

Investigating the Digital Citizenship Levels of ELT Students university students' perceptions) (Master's thesis). Anadolu University, Eskişehir, Turkey.

- Walters, M.G., Gee, D., & Mohammed, S. (2019). A literature review: Digital citizenship and the elementary educator. *International Journal of Technology in Education (IJTE)*, 2(1), 1-21.
- Xu, S., Yang, H. H., MacLeod, J., & Zhu, S. (2019). Social media competence and digital citizenship among college students. *Convergence*, 25(4), 735-752. <https://dx.doi.org/10.1177/1354856517751390>
- Yalçınkaya, B., & Cıbaroğlu, M. O. (2019). Investigation of digital citizenship perception: An empirical evaluation. *Business & Management Studies: An International Journal (BMIJ)*, 7(4), 1188-1208. <https://dx.doi.org/10.15295/bmij.v7i4.1140>
- Yaman, F., Kabakçı Yurdakul, I., & Dönmez, O. (2020). Dijital vatandaşlıktan dijital ebeveynliğe dönüşüm [Transformation from digital citizenship to digital parenting]. In A. Görgün Baran, O. Hazer, & S. Öztürk (Eds.) *Gençlik ve dijital çağ (Youth and the digital age)* (pp. 165-180). Hacettepe University.
- Yıldız, E. P., Çengel, M., & Alkan, A. (2020). Determination of digital citizenship levels of university students at Sakarya University Turkey. *International Journal of Higher Education*. 9(3), 300-308.
- Yılmaz, M., & Doğusoy, B. (2020). Determination of the digital citizenship levels of prospective teachers. *Kastamonu Education Journal*, 28(6), 2362-2375. <https://dx.doi.org/10.24106/kefdergi.692492>