

## Digital citizenship and its teaching: A literature review

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Article Info	Abstract
<p><b>Keywords:</b></p> <p>Digital citizenship Elements of digital citizenship Teaching Literature review</p> <p>Review Article</p>	<p>Use of digital tools that have entered people's lives in recent years has become a necessity during the COVID-19 pandemic, and students have started to use digital tools extensively both in their lessons and at their home. Students use technology intensively on daily basis, and the need for training these students in a way to establish safe online communication and collaboration has put the concept of digital citizenship on the agenda. In this study, the theoretical framework of the concept of digital citizenship was introduced, and the studies reported in the literature regarding digital citizenship and teaching of it were examined. The studies reviewed included (1) those on the introduction of the concept of digital citizenship or the elements of digital citizenship, (2) those conducted to determine the participants' digital citizenship levels or perceptions, (3) those examining the curricula within the framework of digital citizenship, and (4) those carried out in relation to teaching of digital citizenship and its elements. The studies in each group were briefly introduced. As a result of the study, several suggestions were put forward regarding digital citizenship education.</p>

### 1. Introduction

The digital tools that have entered the lives of people with the development of technology in recent years allow them to share their photos, videos, drawings or views in virtual environments such as social media and to make joint projects with people from different parts of the world (Fingal, 2020). During the COVID-19 pandemic, the use of digital tools has become a necessity, and students have started to use digital tools extensively both in their lessons and at their home (Ranchordas, 2020). Since they use technology extensively on daily basis, it is necessary to prepare students in a way to have them communicate and collaborate safely and responsibly in online environments (Parent and Community Impact, Technology, 2018; Tan, 2011). Safe and responsible online communication and collaboration have brought the concept of digital citizenship to the fore (Ribble, Bailey, & Ross, 2004; Ribble, 2008; Shelley, 2004). The rules for correct and responsible technology usage that provide guidance to students on how to direct the online world in their personal and academic lives rather than just being a citizen of a country are called digital citizenship (Parent and Community Impact, Technology, 2018; Ranchordas, 2020; Tan, 2011). Ribble and Bailey (2007) define digital citizenship as the online display of behaviors that ensure the legal, safe, ethical and responsible use of information and communication technologies.

In order to better understand the concept of digital citizenship, the definition of citizenship can be considered: According to the current Turkish dictionary, citizenship refers to "the state of being born, growing up or having lived in a country" (TDK, 2020). Alberta Education (2012) defines citizenship as being a member of a social, political or national community. Accordingly, the community is at the center

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of the definition; in other words, citizenship takes place within a community and includes both rights and responsibilities. For example, there are rights for community members like the right to speak freely, and there are responsibilities along with these rights as well. Responsibilities are the boundaries within which community members have to live. Except for some minor differences, this general framework applies to digital citizenship (Alberta Education, 2012).

Traditionally, the basic principles of citizenship are reported to include being respectful and polite, responsible and making positive contributions to the society (Impero Software & Digital Citizenship Institute, 2016). The principles of digital citizenship are not much different from those of traditional citizenship (Somyürek, 2019). Just as all children throughout human history need help from their parents and teachers to become good citizens, today's young people, called digital natives, also need guidance to learn how to apply citizenship principles in the digital world (Impero Software & Digital Citizenship Institute, 2016; Fingal, 2020). The International Society for Technology in Education [ISTE] (2016, 2018) reports the characteristics of a good citizen and those of a good digital citizen as in Table 1.

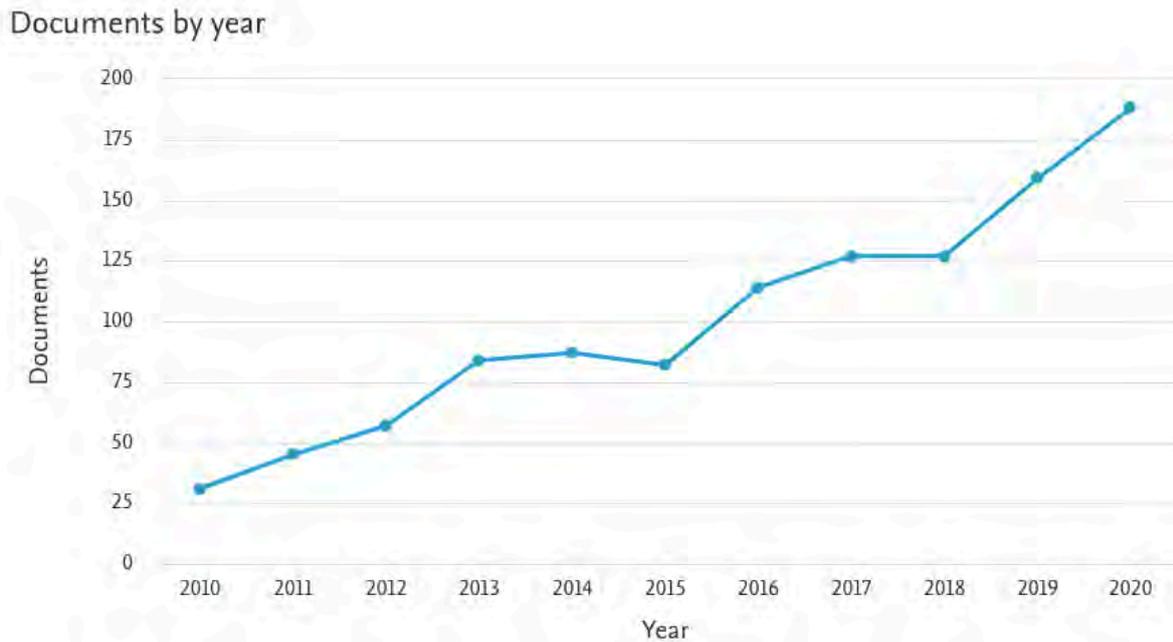
**Table 1.**

Citizenship in the digital era (ISTE, 2016, 2018).

<b>A good citizen</b>	<b>A good digital citizen</b>
<b>1</b> advocates equal human rights for all.	advocates equal digital rights and digital access for all.
<b>2</b> treats other people with respect.	tries to understand all points of view.
<b>3</b> does not damage or steal other people's belongings (assets).	respects the digital privacy, intellectual property and other rights of online people.
<b>4</b> communicates openly, respectfully and empathetically.	communicates and empathizes with other people through digital channels and treats them with empathy.
<b>5</b> speaks honestly and does not repeat unconfirmed news.	uses critical thinking for all online resources and does not share unreliable sources such as fake news or advertisements.
<b>6</b> works to make the world a better place.	uses technology to support and develop social goals.
<b>7</b> protects himself and other people from harm.	gives importance to physical, emotional and mental health while using digital tools.
<b>8</b> works with other people in social projects.	uses digital tools to collaborate with other people.
<b>9</b> always maintains a positive self-image.	understands the permanence of the digital world and manages his/her digital identity by taking the necessary measures.

According to ISTE (2018), students should learn to improve the skills listed in Table 1 in order to be successful in their schools, work life and society.

Digital citizenship and teaching of it have gained importance in recent years and are now the subject of intensive scientific research. This situation can also be seen in the graph below obtained by analyzing the number of studies conducted in the last 10 years as a result of the search done with the keyword of "digital citizenship" in the Scopus database (Figure 1).



**Fig. 1.** The number of studies on digital citizenship

As can be seen in Figure 1, the number of scientific studies on digital citizenship has increased over the years. This situation could be considered to be an indication that the importance of digital citizenship is gradually increasing and will become an indispensable part for the world of tomorrow. Although many studies have been carried out on digital citizenship in recent years, there is no literature review study except for the study by Walters, Gee and Mohammed (2019). Walters et al. (2019) conducted a literature review covering the studies on elementary school teachers' knowledge, beliefs and activities they planned and implemented in relation to digital citizenship. The present study was conducted considering the low number of studies in the literature which examined and classified the studies on digital citizenship and teaching of it. In this study, the purpose was to introduce the theoretical framework of the concept of digital citizenship and to examine and classify the studies on digital citizenship and teaching of it in the literature. It is thought that the study will guide researchers who will work on digital citizenship and teaching of it. The study is thought not only to guide researchers who will work on digital citizenship and its teaching but also to contribute to the field of digital citizenship education. The following section introduces the theoretical framework of the concept of digital citizenship.

## 2. Theoretical Framework

The need for the rules for correct and responsible technology usage so that students can communicate and collaborate safely and responsibly has put the concept of digital citizenship on the agenda (Parent and Community Impact, Technology, 2018; Ranchordas, 2020; Ribble, Bailey, & Ross, 2004; Ribble, 2008; Shelley, 2004; Tan, 2011). Digital citizenship, defined as the online display of behaviors that ensure the legal, safe, ethical and responsible use of information and communication technologies, is considered to include nine basic elements (Ribble, 2011; Ribble & Bailey, 2007). These elements are identified to provide a framework for digital citizenship education and to ensure the best use of technology in society. The nine elements of digital citizenship are examined under three main categories (Government of Newfoundland and Labrador Education, 2013; Impero Software & Digital Citizenship Institute, 2016; ISTE, 2016; Ribble, 2008, 2011; Ribble & Bailey, 2007). These are (a) respect for self and other people, (b) self-education and connecting with other people and (c) protecting self and other people. The elements of digital citizenship belonging to the categories are as follows:

### a. Respect for self and other people

1. **Digital access:** Fully electronic participation in the society. Can all users participate in the digital society at an acceptable level at any time?
2. **Digital etiquette:** The online behavior standards that digital technology users are expected to apply. Do users think of other people when using digital technologies?
3. **Digital law:** Legal rights and restrictions regulating the use of technology. Are users aware of the laws (rules, policies) regulating the use of digital technologies?

### b. Self-education and connecting with other people

1. **Digital communication:** Electronic information exchange. Do users have an understanding of digital communication methods and of when they are correct?
2. **Digital literacy:** The ability to know and use when and how to use digital technology. Do users take the time to learn about digital technologies? Do they share this information with other people?
3. **Digital commerce:** Online shopping. Do users have knowledge and protection to shop in the digital world?

### c. Protecting self and other people

1. **Digital rights and responsibilities:** The privileges and freedoms given to all digital technology users and the expectations from them. Are users ready to protect other people's rights in order to protect their own digital rights?
2. **Digital security:** Precautions to be taken to protect the personal security of all technology users and the security of their networks. Do users take the time to protect their information and also take precautions to protect other people's data?
3. **Digital health and wellness:** Physical and psychological health aspects related to the use of digital technology. Do users consider both physical and psychological risks when using digital technology?

Alberta Education Cataloging in Publication Data, a document created by the Alberta State Ministry of Education located in the west of Canada to adapt digital citizenship to the education system, added two more elements to these nine elements in the source named Digital Citizenship Policy Development Guide (Alberta Education, 2012):

1. **Cloud computing:** Easily access to networked servers across the Internet. Cloud computing increases the possibilities of hardware and decreases the cost. Therefore, cloud computing has the potential to increase the accessibility to technology resources, yet it also increases the risk of security and information privacy.
2. **Personal Devices:** Technologies belonging to students or teachers such as smartphones, tablets and laptops. These devices might or might not be connected to the school network. An important problem with personal devices is that these devices have the same features, which means they are not standard. Standard hardware and devices are advantageous in terms of universal service and support. Personally-selected devices have advantages with respect to personalization, ownership and responsibility. There must be a balance in accordance with the purpose and application of the technological source. In addition, by bringing personal devices to the school and to encourage their use for educational purposes, and the activities and programs used by students with personal devices should be designed in a way to be suitable for students who do not have personal devices.

According to Alberta Education (2012), these 11 elements include a series of thoughts and questions for policy makers in terms of teaching the complex subject of digital citizenship.

The following section presents studies in the literature regarding digital citizenship and its teaching.

### 3. Literature on digital citizenship and its teaching

When studies on digital citizenship and teaching of it are examined, it is seen that most of them are related to the introduction of the concept of digital citizenship or the elements of digital citizenship (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; Sağıroğlu, Bülbül, Kılıç, & Küçükali, 2020; Walters et al., 2019; Yaman, Kabakçı Yurdakul, & Dönmez, 2020). A great majority of the studies in the literature are about determining digital citizenship levels or perceptions of students, educational administrators, preservice teachers and teachers (Al-Abdullatif & Gameil, 2020; Akcil, Altinay, & Altinay, 2016; Al Raqqad, 2020; Arcagök, 2020; Aslan, 2016; Ata & Yıldırım, 2019; Aygün, 2019; Aygun & Ilhan, 2020; Çebi & Bahçekapılı Özdemir, 2019; Çepni, Oğuz, & Kıcan, 2014; Dedeşali & Dasedemir, 2019; Dere & Yavuzay, 2019; Elmalı, Tekin, & Polat, 2020; Görmez, 2017a; Hollandsworth, Dowdy, & Donovan, 2011; Hollandsworth, Donovan, & Welch, 2017; Jwaifell, 2018; İridağ, 2020; Kabataş, 2019; Kaya & Kaya, 2014; Korucu & Totan, 2019; Martin, Hunt, Wang, & Brooks, 2020b; Nazik et al., 2020; Öztürk, 2019; Peker Ünal, 2017; Som Vural, 2016; Xu, Yang, MacLeod, & Zhu, 2019; Yalçınkaya & Cibaroğlu, 2019; Yılmaz & Dogusoy, 2020). There are also studies in the literature examining the subjects and outcomes in the curricula within the framework of digital citizenship (Aydemir, 2019; Başarmak, Yakar, Güneş, & Kuş, 2019; Görmez, 2017b; Kara & Atasoy, 2019; Peker Ünal, 2017; Turan & Karasu Avcı, 2018). There are also studies on teaching of digital citizenship and its elements (Altinay Gazi, 2016; Buchholz, DeHart, & Moorman, 2020; Cunningham, 2018; Edtech, 2020; Farmer, 2011; Gleason & Von Gillern 2018; Hays, 2019; Hertz, 2011; Hui & Campbell, 2018; Krutka & Carpenter, 2017; Lauricella, Herdzina, & Robb, 2020; Lynch, 2017; Martin, Gezer, Wang, Petty, & Wang, 2020a; Özer & Albayrak Özer, 2020; Ribble, 2012; Tapingkae, Panjaburee, Hwang, & Srisawasdi, 2020; Vlaanderen, Bevelander, & Kleemans, 2020). These studies are introduced in the following sections.

#### 3.1. *Studies on the introduction of the concept of digital citizenship or the elements of digital citizenship*

Apart from the studies cited in the theoretical framework section, there are also studies explaining what the concept of digital citizenship means in the literature. Çubukçu and Bayzan (2013) explained digital citizenship and its elements and mentioned the steps to be taken in Turkey in line with the developments in digital citizenship. The heading of digital citizenship was included in two different sections in the Digital Literacy book prepared within the scope of the Safe Internet Center's book series of open-source content production project, and the concept of digital citizenship was explained together with the introduction of its elements (Karakuş Yılmaz, 2020; Sağıroğlu et al., 2020). Yaman et al. (2020) introduced the concept of digital parenting after introducing digital citizenship and its elements. Walters et al. (2019), by introducing digital citizenship and its elements, conducted a literature review study that covered the studies conducted in the context of elementary school teachers' knowledge, beliefs and activities they planned and implemented in relation to digital citizenship. Choi (2016), after mentioning the definition and types of traditional citizenship, examined 254 studies conducted on digital citizenship between 2003 and 2014. In the study carried out with the concept analysis method, it was concluded that there were four categories constituting the concept of digital citizenship: Ethics, Media and Information Literacy, Participation/Engagement and Critical Resistance. In the study, it was suggested that digital citizenship should be understood as a multidimensional and complex concept that is mutually but non-linearly related to offline (location-based) civil lives.

#### 3.2. *Studies on determining the participants' digital citizenship levels or perceptions*

In some of the studies carried out to determine the participants' digital citizenship levels or perceptions, the purpose was to determine the extent to which elementary, secondary, high school and university level

students owned the characteristics related to the elements of digital citizenship (Al-Abdullatif & Gameil, 2020; Al Raqqad, 2020; Çebi & Bahçekapılı Özdemir, 2019; Çepni et al., 2014; Jwaifell, 2018; İridağ, 2020; Korucu & Totan, 2019; Martin et al., 2020b; Nazik et al., 2020; Öztürk, 2019; Peker Ünal, 2017; Som Vural, 2016; Yalçınkaya & Cibaroğlu, 2019), while some others studies aimed to identify these characteristics within the contexts of educational administrators, teachers or preservice teachers (Akcil et al., 2016; Arcagök, 2020; Aslan, 2016; Ata & Yıldırım, 2019; Aygün, 2019; Aygun & Ilhan, 2020; Dedeali & Dasdemir, 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 & Dogusoy, 2020). In some of these studies, the participants' digital citizenship levels or perceptions were high (Al Raqqad, 2020; Aslan, 2016; Ata & Yıldırım, 2019; Elmalı et al., 2020; Kabataş, 2019; Yılmaz & Dogusoy, 2020); in some studies, these levels and perceptions were moderate (Akcil et al., 2016; Arcagök, 2020; Aygün, 2019; Aygun & Ilhan, 2020; Çebi & Bahçekapılı Özdemir, 2019; Çepni et al., 2014; Dedeali & Dasdemir, 2019; Hollandsworth et al., 2011, 2017; İridağ, 2020; Kaya & Kaya, 2014; Korucu & Totan, 2019; Nazik et al., 2020; Öztürk, 2019; Som Vural, 2016; Xu et al., 2019; Yalçınkaya & Cibaroğlu, 2019); and in some other studies, these levels and perceptions were found low (Al-Abdullatif & Gameil, 2020; Dere & Yavuzay, 2019; Görmez, 2017a; Jwaifell, 2018; Martin et al., 2020b; Peker Ünal, 2017). Some of the studies in this category included scale development studies conducted to determine the participants' digital citizenship levels or perceptions (Al-Zahrini, 2015; Choi, Glassman, & Cristol, 2017; Elçi & Sarı, 2016; Jones & Mitchell, 2016; Isman & Gungoren, 2014; Kim & Choi, 2018; Kocadağ, 2012; Kuş, Güneş, Başarmak, & Yakar, 2017; Nordin et al., 2016).

### 3.3. *Studies examining the curricula within the framework of digital citizenship*

In Turkey, several studies have been conducted in recent years to examine the subjects and outcomes in the curricula within the framework of digital citizenship. In Turkey, various course books and curricula were examined within the framework of digital citizenship and its elements at elementary school, secondary school and high school levels. In these studies, it was concluded that digital citizenship and its elements were not included in the curricula at all or there was little research (Aydemir, 2019; Başarmak, Yakar, Güneş, & Kuş, 2019; Görmez, 2017b; Kara & Atasoy, 2019; Peker Ünal, 2017; Turan & Karasu Avcı, 2018). Başarmak et al. (2019) stated that the content on digital citizenship was mostly included in the computer science curriculum, and the democracy and human rights curriculum.

### 3.4. *Studies on teaching of digital citizenship and its elements*

Studies on teaching of digital citizenship and its elements can be examined in two groups: (1) Studies in which suggestions were put forward related to teaching of digital citizenship and its elements or in which examples of related activities were presented (Buchholz et al., 2020; Cunningham, 2018; Edtech, 2020; Farmer, 2011; Gleason & Von Gillern, 2018; Hays, 2019; Hertz, 2011; Krutka & Carpenter, 2017; Lynch, 2017; Ribble, 2012; Özer & Albayrak Özer, 2020), (2) studies which determined the status of digital citizenship education or which presented experimental results regarding teaching of digital citizenship and its elements (Altınay Gazi, 2016; Hui & Campbell, 2018; Lauricella et al., 2020; Martin et al., 2020a; Tapingkae et al., 2020; Vlaanderen et al., 2020).

Farmer (2011), who conducted one of the studies examined in the first group, defined digital citizenship, discussed its results on individuals and the learning community in general, and suggested strategies for digital citizenship education. Hertz (2011) mentioned course resources and online learning tools on his blog page, where he shared his experiences regarding teaching digital citizenship to elementary school students. In another study, Ribble (2012) introduced digital citizenship and its elements and explained why teaching is necessary. Lynch (2017) introduced the applications, tools and resources related to teaching digital citizenship to students. Regarding the sources introduced, the researcher gave information about the target age group, characteristics and the extra content offered. Krutka and Carpenter (2017) argued that teaching via social media will enable students to develop as digital citizens within democracy. In the study, three

types of educational activities for digital citizenship were suggested to be applied in the democratic curricula. Cunningham (2018) put forward suggestions in relation to teaching digital citizenship to children with learning difficulties and attention deficit problems. Gleason and Von Gillern (2018) conducted a case study on the use of social media for teaching digital citizenship. In the study, a curriculum supported with social media was proposed for secondary and high school students to develop their digital citizenship practices. Hays (2019) explained both the methods that can be used to develop students' digital citizenship and the things to be done with these methods. Ways for teachers to support digital citizenship and for students to engage with digital citizenship were suggested. In a study conducted by Buchholz et al. (2020), the researchers discussed the concept of digital citizenship within the context of the changing educational practices after the COVID-19 epidemic, and scenarios were presented for the solution of four ethical problems posed by ISTE. With the scenarios presented in the study, the purpose was to make teachers think about developing digital literacy and digital citizenship in their classes. Edtech (2020) introduced resources for teaching digital citizenship for K12 teachers, including articles, online games, applications, web pages, tools, lesson plans, activities, curricular ideas and videos. Özer and Albayrak Özer (2020) prepared a book containing examples of activities for teaching the dimensions of digital citizenship.

Altnay Gazi (2016), who conducted one of the studies examined in the second group, taught digital citizenship for one hour and concluded that there was an increase in digital citizenship awareness of high school students and teachers who participated in the study. Hui and Campbell (2018) stated that after a course in which digital citizenship and its elements were taught, preservice teachers showed development in all the elements of digital citizenship except digital ethics and digital health. Lauricella et al. (2020) examined elementary school teachers' efficacies in teaching digital citizenship. In the study conducted with the participation of 585 elementary school teachers in the USA, most of the teachers stated that they taught at least one digital citizenship competence, and one-third of the teachers stated that they did not teach any digital citizenship competence. In the study, it was concluded that the teachers' competencies in teaching digital citizenship differed depending on the class grade they were teaching, the type of the school they worked in and their years of seniority in teaching. Martin et al. (2020a) found that digital citizenship knowledge of teachers who attended a professional development course increased significantly compared to their knowledge levels before the course. Tapingkae et al. (2020) designed a game-based learning environment for seventh and eighth grade students so that they could learn digital citizenship behaviors. It was revealed that digital citizenship behaviors of the students studying in the game-based learning environment developed and that their motivations and perceptions regarding learning increased. Vlaanderen et al. (2020) reached the conclusion that children between the ages of 10-12 strengthened their digital citizenship after they were taught about cyber-bullying.

#### **4. Discussion, conclusion and suggestions**

During the COVID-19 epidemic, students started to use digital tools extensively both in their lessons and at their home and use of digital tools has become a necessity (Ranchordas, 2020). Students using digital tools extensively should be prepared to communicate and collaborate online in a safe and responsible manner (Parent and Community Impact, Technology, 2018; Tan, 2011). The need for establishing communicate and collaborating securely and responsibly online has brought up the concept of digital citizenship (Ribble et al., 2004; Ribble, 2008; Shelley, 2004). In this study, the theoretical framework of the concept of digital citizenship was introduced, and the studies in the literature on digital citizenship and teaching of it were examined. The studies examined were classified as follows: (1) those on the introduction of the concept of digital citizenship or its elements, (2) those conducted to determine the participants' digital citizenship levels or perceptions, (3) those examining the curricula within the framework of digital citizenship, and (4) those related to the teaching of digital citizenship and its elements.

It was seen that most of the studies in the literature were about determining the participants' digital citizenship levels or perceptions. In most of these studies, the participants had moderate digital citizenship

levels and perceptions (Akcil et al., 2016; Arcagök, 2020; Aygün, 2019; Aygun & Ilhan, 2020; Çebi & Bahçekapılı Özdemir, 2019; Çepni et al., 2014; Dedebali & Dasedemir, 2019; Hollandsworth et al., 2011, 2017; İridağ, 2020; Kaya & Kaya, 2014; Korucu & Totan, 2019; Nazik et al., 2020; Öztürk, 2019; Som Vural, 2016; Xu et al., 2019; Yalçinkaya & Cibaroğlu, 2019). Based on the fact that there was high number of studies in which the participants' digital citizenship levels or perceptions were moderate or low (Al-Abdullatif & Gameil, 2020; Dere & Yavuzay, 2019; Görmez, 2017a; Jwaifell, 2018; Martin et al., 2020b; Peker Ünal, 2017), it could be stated that there is a need for teaching digital citizenship and its elements.

In recent years, there has been a decrease in the number of studies in which suggestions for teaching digital citizenship and its elements or examples of related activities were presented (Buchholz et al., 2020; Cunningham, 2018; Edtech, 2020; Farmer, 2011; Gleason & Von Gillern, 2018; Hays, 2019; Hertz, 2011; Krutka & Carpenter, 2017; Lynch, 2017; Ribble, 2012; Özer & Albayrak Özer, 2020) and an increase in the number of studies in which the results of educational practices were presented (Altınay Gazi, 2016; Hui & Campbell, 2018; Martin et al., 2020a; Tapingkae et al., 2020; Vlaanderen et al., 2020). Accordingly, it could be stated that the importance given to teaching digital citizenship has increased. During the COVID-19 pandemic, the fact that students and teachers have to use digital tools requires more attention to the issue of teaching of digital citizenship and its elements. For this reason, in order to teach digital citizenship and its elements, related curricula should be prepared, and activities should be planned in line with the studies in the literature.

It was seen that the studies in which the curricula were examined within the framework of digital citizenship were mostly related to the curricula applied in Turkey. In Turkey, there is no course dedicated completely to teaching digital citizenship at elementary, secondary and high school levels (Ministry of National Education, 2018). There are outcomes, but not enough in number, regarding digital citizenship in the information technologies and software curriculum and in the social studies curriculum at elementary and secondary school levels and in the computer science curriculum and in the democracy and human rights curriculum at high school level (Aydemir, 2019; Başarmak et al., 2019; Görmez, 2017b; Kara & Atasoy, 2019; Peker Ünal, 2017; Turan & Karasu Avcı, 2018). With the changes done in the curricula at elementary, secondary and high school levels in Turkey in 2018, the competencies that students were expected to gain within the scope of all curricula were determined. Among these competencies, in relation to digital competence, characteristics related to digital citizenship were emphasized (Ministry of National Education, 2018). In addition, the curricula implemented in education faculties where teacher candidates training programs are applied were changed as well in 2018 (Council of Higher Education, 2018). Within the scope of the renewed curricula, there is no course dedicated completely to teaching digital citizenship. There are courses in the department of Computer Education and Instructional Technology and in the department of Social Studies, which cover the subject of digital citizenship or its elements. These courses are the compulsory field education course of "information ethics and security" in the department of Computer Education and Instructional Technology and the elective field education course of "media literacy". The subject of digital citizenship was also included in the course of "citizenship knowledge", which is a compulsory field education course in the department of Social Studies (Council of Higher Education, 2018). It could be stated that the courses aforementioned are very insufficient for teachers who will train the digital citizens of the future. Accordingly, courses completely dedicated to digital citizenship education could be given at both elementary, secondary, high school and undergraduate levels.

According to the review of the related literature, many studies have been conducted on digital citizenship and its teaching in recent years. Among the studies examined, there was no literature review study except for the study conducted by Walters et al. (2019). The study carried out by Walters et al. (2019) covered studies conducted within the context of elementary school teachers' knowledge, beliefs and educational activities regarding digital citizenship. The present study, which has been observed that the number of studies which examined and classified the studies on digital citizenship and its teaching in the literature

was inadequate, will guide researchers who will work on digital citizenship and its teaching. The study will also contribute to the field of teaching digital citizenship.

## Dijital Vatandaşlık ve Öğretimi: Bir Literatür Taraması

### Özet

Son yıllarda insanların hayatlarına giren dijital araçları kullanmak COVID-19 salgın sürecinde bir zorunluluk haline gelmiş ve öğrenciler hem derslerinde hem de evde dijital araçları yoğun olarak kullanmaya başlamışlardır. Teknolojiyi günlük olarak yoğun kullanan öğrencilerin güvenli ve sorumlu bir şekilde çevrimiçi iletişim kurmaya ve işbirliği yapmaya hazırlama gereksinimi dijital vatandaşlık kavramını gündeme getirmiştir. Bu çalışmada dijital vatandaşlık kavramının teorik çerçevesi tanıtılmış ve literatürdeki dijital vatandaşlık ve öğretimi ile ilgili çalışmalar incelenmiştir. İncelenen çalışmalar (1) dijital vatandaşlık kavramı veya dijital vatandaşlığın elemanlarının tanıtımı ile ilgili çalışmalar, (2) katılımcıların dijital vatandaşlık düzeylerini veya algılarını belirlemeyle ilgili çalışmalar, (3) ders programlarının dijital vatandaşlık çerçevesinde incelendiği çalışmalar ve (4) dijital vatandaşlık ve elemanlarının öğretime yönelik çalışmalar olarak sınıflandırılmış ve her bir gruptaki çalışmalar kısaca tanıtılmıştır. Çalışma sonucunda dijital vatandaşlık öğretime yönelik olarak önerilerde bulunulmuştur.

**Anahtar kelimeler:** Dijital vatandaşlık, dijital vatandaşlığın elemanları, öğretim, literatür taraması

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