

## **Awareness and Incorporation of Digital Citizenship by the Iranian EFL Learners and Teachers**

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### **Abstract**

The present research is a ethnographic inquiry conducted in the context of a social networking platform to explore how the rules and norms of digital citizenship are being understood and implemented among Iranian EFL learners and teachers, and how this can be improved. For this purpose, eight academic learner and teacher groups, consisting of 7235 members in total, were meticulously observed in one year. To address triangulation, the researchers used observations accompanied by field notes, memos, and semi-structured interviews. This resulted in 9000 pages of the content, including text chats and subsequent interview data, which were extensively analyzed through directed qualitative content analysis based on Ribble's (2011) digital citizenship model. Findings of the present research revealed that despite the significance of digital citizenship in the highly digitalized world of the day, and very frequent use of social networking for educational purposes, Iranian EFL learners and teachers lack the needed skills for appropriate and effective presence in technology-enhanced settings. This research has several implications for English teachers, learners, policy makers and curriculum designers, especially to include digital citizenship courses in CALL courses, teachers' TTCs, and students' curricula, at different levels of instruction and learning.

**Keywords:** EFL Teachers, EFL Learners, Digital Citizenship, Qualitative Content Analysis

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## Introduction

With the accelerating pace of technological enhancements like high-speed web services, smartphones, high-tech apps, and social networking sites, knowing about the appropriate use of technology is an urgent need. Students are starting to use digital technologies, usually via the Internet at early ages. However, it seems that they do not know how to use technology properly to have effective and productive online collaborations and be at fewer risks. As digital natives, teens are very comfortable using digital tools without understanding the complexities and risks associated with using technology (Kirschner & Karpinski, 2010).

Similarly, teachers have started to incorporate technology in various aspects of their professional activities (Lindsey, 2015; Mattson, 2016; Sánchez, Manzuoli, & Bedoya, 2019). They have recognized that technology can play a significant role in improving teaching and learning by connecting them to content, tools, resources, and different teaching, helping them track student performance and improving communication with parents and peers (Serva & Fuller, 2004). As far as second/foreign English education is concerned, a huge number of internet tools offer unprecedented potentials to improve second-language learning. This demands more awareness about the proper use of technology among English learners and teachers, which is very often missing (Kim & Choi, 2018).

Under these circumstances, there need to be some regulations among technology users— as the citizens of the digital world— called *digital citizenship* (DC), which means to help users have more effective, appropriate, and secure communications (Ribble, 2004). Digital citizenship has been defined as the proper use of technology and applies to everyone using technology to gain academic (Ribble, 2012) and societal advantages (ISTE, 2007). It “encompasses a wide range of behaviors with varying degrees of risk and possible negative consequences, and lack of digital citizenship awareness and education can, and has, led to problematic, even dangerous student conducts” (Hollandsworth, Dowdy & Donovan, 2011, p. 37). In fact, investigating DC in educational settings is significant since digital technology use has become part of regular activities in educational settings, and users’ misapplication of technology can lead to victimizing themselves and others (Ribble & Miller, 2013). It can negatively influence various aspects of their growth, including their cognition, emotion, and their physical and moral health (Jensen, 2008).

Despite the significance of DC in academic settings, the available literature is still concerned with theorizing and expanding various facets of the concept (e.g., Hobbs & Jensen, 2009; Ribble, Bailey, & Ross, 2004). Most DC studies are still theoretical, providing general information and frameworks along with guidelines for educators about teaching digital citizenship to students (Hollandsworth et al., 2011; Ribble, 2011). DC is becoming one major issue of the day especially since students are using tools which are created for adults. This “requires them to become more mature in their interpersonal skills of how to balance their online interactions with those in real life” (Ribble & Miller, 2013, p. 137). The study of this problem and

many other DC-related issues such as the required ethical considerations, values, skills, and self-identity of learners and teachers in Iranian EFL contexts are still missing.

According to some empirical studies conducted in countries other than Iran, students have mostly proved to be either unaware of DC principles, or not observant of DC expectations and rules (Assumpcao & Sleiman, 2011; Flores & James, 2013; Davis, Katz, Santo, & James, 2010). This is while the majority of learners are in control of techniques for incorporating digital instruments and manipulating their functions (Kvavik, 2005). So far as teachers are concerned, some studies on DC skills among teachers have been conducted in a number of countries other than Iran (e.g., Chik, 2011; Choi, 2015). They generally reveal that teachers are technically less proficient than learners, but similarly unaware or unobservant of DC rules.

In our local context, learners' and teachers' awareness and implementation of DC are still unidentified, and need thorough investigations. To the best knowledge of this paper's authors, no studies have been conducted up to the present, to probe how the Iranian learners and teachers of English as a foreign language (EFL) conceive and practice DC in their academic activities. This qualitative study means to address part of this need through comparative investigation of EFL teachers' and learners' practices on the Web, to explore their command of the concept of DC through observation of their activities and conducting subsequent interviews. Although this topic is largely absent in the literature of TEFL and absolutely missing in the Iranian EFL pedagogical context, the most related issues are presented in the following section.

## **Literature Review**

Since DC is the central issue of this study, it will be reviewed in this section in terms of the concept definition, most popular models for its conceptualization, its current status and how it is viewed and applied among teachers and learners in theoretical and empirical studies.

## **Digital Citizenship**

Digital citizenship has been defined as the *proper* and *responsible* use of technology (Ribble, 2012, 2015). Several *cognitive*, *emotional*, and *behavioral* components have been attached to this concept by different scholars. However, there is a general consensus among them in recognizing the norms and rules required in digital settings. In a nutshell, cognitive factors cover abilities, including communication, autonomous judgment, rational decision making, and critical thinking ability. Emotional factors include human dignity, tolerance, community consciousness, responsibility, and care. Finally, the behavioral factors are concerned with active participation, autonomous regulation, compliance with rules and laws (Kim & Choi, 2018).

The most well-known model of DC consists of the following nine elements, which need to be taken into account when on the Web (Ribble, 2011):

1. Digital etiquette: standards of behavior in online spaces, which are often unwritten, rapidly changing, varying greatly across different online spaces, groups of users, and generations.

2. Digital access: the ability to participate fully in a digital society, affected by socioeconomic status, location, and disability.

3. Digital law: legal responsibilities for electronic actions, including copyrighted online materials, hacking into systems, digital identity theft, or posting illicit photos.

4. Digital communication: any communication through electronic instruments such as cell phones, social networking services, email, and texting.

5. Digital literacy: the ability to use digital media to find needed information, evaluate its quality, and create new information through various digital media.

6. Digital commerce: electronic buying and selling of goods and services such as books, articles, software, and language applications.

7. Digital rights and responsibilities: freedom and privileges as well as the expected behaviors.

8. Digital health and wellness: physical and psychological considerations to avoid potential health risks of improper or overuse of technology, such as carpal tunnel syndrome, eyestrain, and poor posture.

9. Digital safety and security: strategies and precautions to ensure safe and fair use of ICT.

Parallel with Ribble's (2004, 2006) conceptualization of DC, International Society for Technology in Education (ISTE) proposed DC standards for teachers (ISTE•T) and for students (ISTE•S) separate models for teaching and learning in an "increasingly connected and global digital society" (ISTE, 2012, P. 1). The ISTE standards for teachers meant to

- facilitate and inspire student learning and creativity
- design and develop digital age learning experiences and assessments
- model digital age working and learning
- promote and model digital citizenship and responsibility
- engage in professional growth and leadership (ISTE, 2008, pp. 2-5).

The ISTE Standards for students aimed to aid students to:

- take an active role in choosing, achieving, and demonstrating competency in their learning goals;
- recognize the rights, responsibilities and opportunities of living, learning, and working in an interconnected digital world, as they act and model in ways that are safe, legal, and ethical.
- critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others;
- use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.
- develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions;
- communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals;
- use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally (ISTE, 2016, pp. 1-3).

As standards for behavior in online spaces or using technology, DC consists of rules that are often unwritten, rapidly changing as new technology becomes available, and may vary significantly from one online space to another or from one group of users to another. Different generations also have widely divergent views of what is considered appropriate in digital settings, such as using mobile phones during face to face conversations. While etiquette was once taught primarily by parents to their children, parents are often unaware of appropriate behavior in digital networks and are learning alongside their children (Ribble, 2011).

### **The Current Place of Digital Citizenship**

In our digitalized world, social networking environments and new web-based media create additional layers of meaning, allowing new perspectives toward the world and making a shift in the traditional citizenship conception. Technology provides new forms of digital communications that can elicit social change by "re-defining the concept of community" (Sincar, 2011, p. 219). In fact, digital technology has created web-based communities where individuals live, communicate, and interact with each other regularly (Choi, 2015).

"The influence is so drastic in education that teachers are expected to transform into digital citizens and adjust to new technologies and the upcoming cultures" (Sincar, 2011, p. 18). DC is becoming much more important in educational settings, because of students' failure to incorporate technology properly (Ribble, 2006; Ribble & Bailey, n.d.; Ribble & Bailey, 2004; Ribble & Bailey, 2005; Ribble & Bailey, 2006; Ribble, Bailey, & Ross, 2004). Ribble and Bailey (2004) proposed

that this new issue is akin to an outbreak since students can no longer be controlled regarding their use of technology (Ribble & Bailey, 2005).

Several studies have focused on the idea that digital citizens should be familiar with social, cultural, political, economic, and educational issues as related to using the Internet and the digital devices in daily life (Berson & Berson, 2003; Hollandsworth et al., 2011; Ribble et al., 2004). However, many scholars in education hold that taking care of DC ethical concerns is more imperative compared to other facets like financial and political considerations. They emphasize that safe and responsible behavior in online environments, i.e., *digital ethics*, should be seriously taught in educational settings (e.g., Berson & Berson, 2003; Famerer, 2011; ISTE, 2007; Ribble et al., 2004; Ribble & Bailey, 2007; Ribble, 2009; Unicef, 2014; Winn, 2012).

The findings from the studies (Ribble & Miller, 2013; Assumpcao & Sleiman, 2011; Flores & James, 2013; Davis, Katz, Santo, & James, 2010) regarding ethics and morality while using digital affordances revealed that students did not always behave according to the digital citizenship norms when they communicate with others in online contexts. They are very often silent, however, about the ethical practices of teachers on the Web. As a result, it is essential to integrate digital citizenship instruction into educational programs to prevent the potential harms and dangers of online interactions, for both teachers and learners.

### **Digital Citizenship among Learners and Teachers**

The contemporary DC literature can widely be divided into two categories of studies on DC among learners and those conducted among teachers. Since the present study is concerned with both EFL learners and teachers, they are briefly reviewed in this section.

#### **Learners**

The new generation of learners is familiar with computer mouse from early childhood, and start learning and recognizing the world with various television channels, smartphones, blogs, and websites (Veen & Vrakking, 2006). This generation does this on its own and without instruction such that an advanced relationship with technology is shaped at their birth (Beastall, 2008). These digital natives are familiar with the current digitalized devices and technology, because their lives are largely immersed in technology (Jones, 2015; Prensky, 2001). Since they face different forms of technology from birth, they have innate skills such as multitasking for using technology (Prensky, 2003).

On the contrary, some other researchers (Bullen, Morgan, Belfer, & Qayyum, 2008; Ebner, Schiefner, & Nagler, 2008; Kennedy et al., 2007; Kvavik, 2005) in different countries such as Austria, Australia, Canada, Switzerland, and the United States discussed that Net generations of Homo sapiens do not exist. They reported that university students do not have an in-depth knowledge of technology.

They mainly utilize technology affordances for basic needs such as text messaging, surfing the Internet, office skills, and e-mailing. On the basis of his empirical study, Kvavik (2005) reported that students can send e-mails, have basic office suite skills, and search on the Web easily but "moving beyond basic activities is problematic. It appears that they do not recognize the enhanced functionality of the applications they own and use" (p. 77).

In another study, Isman and Canan Gungoren (2013) surveyed 239 university students in Turkey to compare their digital citizenship level through a digital citizenship scale. The findings revealed that students who utilized the Internet for 3 to 6 hours a day to do activities like economic transactions, reading books and using some social media services like Twitter and Google+ had higher levels of digital citizenship than those who did not use these services.

On the contrary, Assumpcao and Sleiman (2011) declared that the mere use of digital instruments does not make up responsible technology users. They carried out a survey among the students at the seventh and tenth grade of junior and senior high school. They found that they were inclined to do things which were ethically incongruent with DC norms and values. Some violations of DC according to their reports included using their friends' passwords, sharing their online passwords with others, exchanging malicious emails, fighting people online, publishing photos of others without permission, entering forbidden websites, gossiping about others, and breaking copyright laws. They warned that if students consider such behaviors as acceptable, they can threaten online collaborative connections with others and endanger people's online reputation, online privacy, and security.

This would naturally raise the need for DC education which is being included in many programs at different curricular levels. One popular program for this purpose is that of Boyle (2010) who carried out a quasi-experimental study to assess the impacts a digital citizenship curriculum had on the use and misuse of technology. It had a convenience sampling design and two control groups of secondary students. One group received the DC curriculum, while the other group did not. The findings of this study demonstrated that the digital citizenship elements including digital literacy, etiquette, communication, law, commerce, health, rights, and responsibilities all yielded significantly better results from participants exposed to the DC curriculum. Boyle's (2010) research showed students should actively engage in a digital citizenship curriculum.

In addition to the demands for DC education, DC is being studied in terms of a variety of variables like gender, age, and academic level. For instance, Lyons (2012) used an ex-post-facto study to explore the differences between grade levels and genders associated with digital citizenship, cyberbullying parental involvement, and personal safety. Participants including 1851 students in grades 5, 7, 9, and 11 from state and district surveys helped collect the quantitative data. Based on the results, the students' gender had a significant impact on personal safety and abuse of digital citizenship; males seemed to be more at risk. Grade level also had a significant impact on personal safety risks and digital citizenship abuse; both of them

expanded with grade level, while parental involvement diminished with grade level. Concerning cyberbullying, percentages increased from 5<sup>th</sup> to 11<sup>th</sup> grade from 7.46% to 19.03%. There were no significant differences between males and females in parental involvement.

In sum, whether digital natives have special, unrivaled abilities or not, and whether particular factors like age and gender contribute to their perception of DC or not, one fact holds true that utilizing various electronic devices does not make them good users of the media that they have at their disposal. They may have the ability to play with technology without using it efficiently, ethically, and responsibly (Bullen et al., 2008; Kvavik, 2005). Learners can search the Web, yet they may not have the skills to find the information they need effectively; and they also lack the critical knowledge to adequately determine the truth and relevance of what they find in the media. The established literature shows the need for digital citizenship education, which is suggested to become part of school policies.

### **Teachers**

So far as teachers are concerned, some studies have been reported since 2004 when Ribble and his colleagues initiated the DC concept. Most studies address the attitude, perceptions, and experiences of teachers regarding DC. For instance, Chik (2011) conducted a mixed-method study to learn about 34 Hong Kong English teachers' perceptions, thoughts, and experiences about using social media sites and digital games in educational contexts. According to Chik (2011), teacher participants avoided technologies in their classrooms due to reasons including the lack of computer literacy, curricular restrictions and the assumption that using social media sites and gaming may be dangerous or troublesome. Chik (2011) insisted on additional professional development "to include and legitimize youth digital practices both in and out of language classrooms" (p. 164). He declared that DC education to teachers can bring about a shift in the mindset of teachers who seem to completely abandon new educational practicalities of modern technologies. This would also enhance teachers' professional development so they could assist students with their DC needs.

In the US, Choi (2015) conducted a research to identify factors that affected in-service teachers' levels of digital citizenship in terms of their thinking, skills and behaviors concerning the Internet use. It was found that teachers had low levels of critical perspective and Internet political activism. Moreover, some variables like Internet self-efficacy, job experience and using social networking sites for educational purposes significantly impacted their digital citizenship perceptions. Another fascinating finding was that digital citizenship and the Internet self-efficacy had a strong relationship.

Similarly, a mixed-methods study was used by Ashmeade (2016) to explore the relationship between certified teachers' perceptions of digital citizenship and their professional improvement. This research aimed at offering professional improvement opportunities related to digital citizenship, so that teachers would be

able to incorporate technology in the classroom more effectively. Lesson plan observations, informal interviews, survey responses, and focus groups were served for collecting the data from 22 participants. It was found that as DC knowledge was improved among teachers, they tended to incorporate digital tools and DC discussions in their classes more readily.

Looking at DC in terms of its potential threats, Pusey and Sadera (2012) studied the DC awareness of a group of pre-service teachers. They were unable to recognize risks in "digital environments that can indicate threats to themselves, their students, and the environments where they work and learn" (p. 87). They believed pre-service teachers do not have the ability to supply instruction on and model digital citizenship roles, and because of the lack of knowledge about the technology, schools encounter a challenge in helping students to learn the digital citizen's regulations.

More specifically, cyber ethics, cyber safety, and cyber security and their threats were taught to teachers as a part of DC education in a qualitative study conducted by Payne (2016). Data were compiled via lesson plans, classroom observations, and initial and follow-up teacher interviews. The recognized themes suggested that teachers were more cautious about the safety and security in real settings in comparison to virtual ones. Moreover, they found the DC curriculum necessary, started to discuss it in their classrooms, and found its teaching a continuing demand. The author recommended that technology standards should be updated to reflect digital citizenship more accurately and strategies of acceptable use should be revamped. Moreover, they declare that it is not good to teach technology skills in isolation; rather, 21<sup>st</sup> century DC skills need be taught to students in order to help them behave ethically when using technology.

With the increasing demand for DC inclusion in school curricula, there seem to be controversial views on the time when DC education should start. Some suggest it must be part of parental training and schooling schedule from the early years of children, yet it is usually part of high school education in most countries (Boyle, 2010; Chambers, 2011; Suppo, 2013). For instance, Suppo (2013) explored the relationship between educational leaders' beliefs and the integration of digital citizenship curricula among 125 teachers, curriculum coordinators, superintendents, and technology coordinators. Findings showed that administrators were in favor of teaching digital citizenship to all students but they thought that issues concerning traditional school behavioral matters were more important than behavioral matters associated with a lack of digital citizenship knowledge. In all, greater emphasis was put on digital citizenship in high school curricula.

As the above mentioned reviews reveal, there is a general consensus and a growing concern around the globe for DC awareness, incorporation and instruction for both teachers and learners. Different facets of DC which were briefly cited are worth studying in the Iranian TEFL contexts. Yet since the issues is just being posed to Iran's TEFL community, this study means to take the initial step to explore how it is conceptualized and practiced by our EFL teachers and learners. This will be

addressed using Ribble's (2011) model and inspired by several theoretical and empirical studies which were partially reviewed in this section. These issues were inspiring for this research in that they provided a thorough insight on what to look for when conducting interviews and observations, though they definitely left enough space for emerging ideas as well. The way this was addressed in the present research is displayed in the following section.

## **Method**

This qualitative inquiry adopts *netnography* which is "a way to do anthropology on the Internet" (Kozinets, 2015, p.3). More specifically, it is a form of ethnographic research, adopting the participant-observational approach and taking online interactions as its fieldwork (Kozinets, 2010). Using this approach is recommended due to

The infrastructural diversities between offline and online settings such as the nature of the interaction which is different from face-to-face encounters, the relative anonymity of participants, the accessibility of the community site, and the possibility of archiving all minutiae of such communities.(Kozinets, 2010, p. 48)

In the present research, netnography was used as a way to of conducting an ethnographic research on the online community of sample EFL learners and teachers.

## **Context**

The context of this study consisted of online groups which were created in instant messaging service of Telegram. Launched in 2013, Telegram is a cloud-based service that can be installed and used on IOS, Android, Windows, Mac os, and Linux os through any browser. Users can send messages and exchange photos, videos, stickers, audio and different files here (Khodarahmi & Shahreza, 2018). Telegram accounts are tied to cell phone numbers and are verified by message or phone call. Several devices such as smart phones, laptop, or tablet can be added to a user's account, and messages are received on each one. Users can remove connected devices individually or all at once. The related number can be changed at any time and when doing so, the user's contacts will receive the new number automatically. In addition, the service can give them a chance to send and receive messages without showing their phone number.

Telegram was chosen as the context of this study due to its availability, popularity in Iran (Yousefzadeh, 2012), manageability reasons, and advantages for teaching and learning including its compatibility with various file formats like jpg, audio, movie, pdf, excel, word, and PowerPoint, large files transfer, grouping facilities, high storage capacity and management, and security for users through encryption. In addition, many researchers report that Telegram is frequently used in Iran for language teaching and learning purposes (Akbari, 2013; Chalak, 2017; Heidari & Alibabae, 2013). Teachers and students widely use this app for

educational purposes, since it provides them with opportunities inside and outside the classrooms, such as communicating with teachers and classmates to do the assignments, solving the probable educational problems, exchanging teaching and learning materials, discussing an issue, and announcing related news and events to others (Abdollahi, 2019).

## **Participants**

In the *observation phase* of the study, three groups of teachers and three groups of learners in Telegram were observed. English teachers were from both genders and aged 20 years old and above. They were either English BA students or holding BA, MA, and PhD degrees in English translation, teaching, or literature. They had been teaching English in institutes, schools, and universities for at least two and at most 26 years. Some teachers' academic degrees were not English but they were engaged in English teaching because they had learnt English abroad or through private English centers in Iran. All teachers' groups were public, and members could join the groups through their links. These three groups had 2702, 2000, and 1407 members, respectively. Teachers came from a variety of Iranian ethnic cultures and numerous provinces, from very small towns to large cities.

In students' groups, there were both female and male members within the age range of 17 to 22, at intermediate, upper-intermediate, and advanced levels of English proficiency. They had been involved in English learning for at least four and at most 12 years. Two of these groups were public and members could join through the group links, but one group was private and belonged to the students and teacher of a class in a High School in Tehran. The number of students in two public groups and one private group was 350, 741 and 35, respectively. Similar to teachers, students in public groups came from a variety of Iranian ethnic cultures and numerous provinces, from very small towns to large cities.

In the *Interview Phase* of the study, 10 teachers and 10 students participated. The teachers were both male and female, teaching English at universities, schools, or English centers. Interviewed students were just female and studied English at schools or English centers. They were from around the country and belonged to a variety of ethnic groups. All of them used digital devices for teaching and learning as well as amusement and fun. The interviewed teachers used the Internet through their mobiles, PCs, and laptops for an average of 3 hours a day, mostly for visiting social media, entertainment, educational, and occupational purposes such as downloading articles and books, entertainment and leisure googling and searching for news.

The interviewed students spent an average of 5 hours per day on the Web through mobiles, laptops, and iPads, to communicate, download films and music, play games, and have fun and entertainment and do their school or university assignments. In this research, teachers are introduced through their pseudo family names like Mr. Alavi and students through pseudo first names like Homa.

## Data Collection Procedure

Data collection of this inquiry was carried out using multiple methods including observation, participation, semi-structured interviews, screen recording, field notes, and memos so as to address *triangulation*. This also helped gain more credible results because triangulation can "reduce the risk of chance associations and of systematic biases due to a specific method" (Maxwell, 2004, p.112). Group members' interactions were meticulously recorded in the course of one year through observations which were enhanced by researcher participation, screen recording, field notes, and reflective memos. Ultimately more than 9000 screen pages including text chats, video and audio files, stickers, and emojis and several field note pages were obtained.

Moreover, to achieve triangulation and take care of the issues which could not be traced in the observation phase, semi-structured interviews were conducted. For this purpose, 10 members of English teachers' groups and 10 members of English learners' groups who were willing to attend the follow-up interviews were selected. Using the main themes in Ribble's (2011) DC model and the issues obtained through observations, the guiding questions were developed. Emerging questions were also formulated in the course of interviews, whenever new, unpredicted topics were posed by the interviewees or new ideas came to the researcher's mind. Generally, interview questions targeted two main areas: participants' *awareness* and *incorporation* of DC norms and rules.

To make sure that the researcher's understanding of the interviewees' words was true, this was checked with each interviewee at the end of each session (Tracy, 2013). At their convenience, participants were interviewed face to face or on the phone. Each interview lasted for an average of 30-45 minutes, and all interviews were audio recorded with the consent of the participants. Although all interview participants were willing to take part in the project and were assured about the research confidentiality, we tried to assure the truth-value of their remarks through establishing rapport with them, conducting follow-up interviews whenever necessary, and asking in-depth questions in different ways to keep the trace of potential contradictory responses. This was reinforced through triangulation, on the one hand, and relying on themes which emerged out of a large corpus of data, rather than single remarks of a few interviewees, on the other hand. During the data collection phase, all audio-type data shared in observed groups and recorded in interviews were transcribed and were used for data analysis along with other text-type data. For manageability reasons, visual messages such as videos and images were not taken into account for analysis.

## Data Analysis

In this study, the *directed* approach to qualitative content analysis was adopted. This approach is used when a prior theory already exists, and the researcher aims to expand, validate, modify, or check it across new settings (Hsieh & Shannon, 2005). Since digital citizenship, already conceptualized and described by Ribble (2011),

was the most established theory of the day and data analysis was done with this framework in mind, it was sort of directed type of content analysis. This approach, however, did not limit the analysis to the pre-existing elements of this model; rather, the researchers felt free to delve into the data for any emerging themes, with the model being there as a guideline for the potential findings. With this approach, the pool of data obtained from observations and interviews was read extensively and meticulously several times for extracting the codes.

For this purpose, three types of coding including “initial, focused, and axial” coding were used (Charmaz, 2006, p. 42) to account for theoretical coding process. During the initial open coding, the collected data were tentatively coded. Then during the process of focused coding, the resulted codes were examined and the main categories were recognized. This led to axial coding through which the categories and subcategories were compared and revised. Eventually, the main themes were extracted out of the obtained categories. The themes were re-checked in the context of observations and interviews to make sure that they really made sense, and represent what the participants actually meant (Tracy, 2013).

The next step was to establish research *trustworthiness*, which can be obtained through *credibility*, *dependability*, *conformability*, *transferability* and *authenticity* (Lincoln & Guba, 1985). Effort was made to achieve all of them as described here. Credibility or believability is achieved through “practices including thick description, triangulation or crystallization, multivocality and partiality” (Tracy, 2010, p. 843). To achieve *triangulation*, a variety of different data collection methods including observations for the course of one year, supplemented by field notes and memos, and interviews were used. All the data obtained from the interviews were recorded, observations were accompanied with field notes and memos, and they were well-documented to make sure that every aspect of the research is quite transparent, and *crystallized*. *Multivocality* was achieved through the inclusion of both learners and teachers from a variety of age ranges, ethnic groups, education backgrounds and the like. All these helped the researchers provide a *thick description* of the whole setting.

To address dependability, i.e., the stability of data over time and conditions, the researchers read the data several times to avoid wrong interpretations. In addition, this stage was repeated after two months to come up with a reasonable set of patterns. Because the same themes were recognized after a period, themetization was finalized. Conformability which refers to including “multiple and varied voices in the qualitative report and analysis” (Tracy, 2010, p. 844) was also taken into account. For this purpose, 10% of the whole data was analyzed by another person who was an applied linguist and expert in content analysis. This yielded 85% of consistency in terms of the recognized themes, through which the “intercoder reliability” was achieved (Strauss & Corbin, 2008, p. 156). Moreover, the data were analyzed again after two months by the researchers to ensure the consistency of themetization (Saldana, 2021), and yielded 88.31% of consistency.

Transferability, which refers to the possibility of transferring the finding of one study to other settings, was addressed through providing detailed descriptions of participants, settings, exchanged messages, and research procedures. This would enable other researchers to judge whether they can transfer our findings to other setting or not. The last required feature under trustworthiness, which is authenticity, refers to the researcher's faithful attempts in conveying the real feeling of participants, their words, and beliefs as it is, without mixing it with personal interpretations. To achieve authenticity, the researchers saved all exchanged messages and took detailed notes of almost all events and their context in the observed groups. Moreover, effort was made to let interviewed participants feel free to express themselves without directing them to any special direction.

## **Results**

Most of the themes extracted out of the data obtained from English teachers and learners were very similar at both observation and interview phases. In other words, teachers and learners were very similar with regard to their command of digital citizenship. However, there were some themes in observation data, recognized solely in one of the participant groups, i.e., either teachers or learners. In the following sections, first the themes common between English teachers and learners are presented. Then, the themes particular to either of the groups are discussed.

### **Observation Themes Common Between English Teachers and Learners**

The largest number of themes emerged out of observations was found to be similar between teachers' and learners' groups, as they are briefly displayed in Table 1:

#### **Netiquette**

Throughout the readings and re-readings of the posts in both teachers' and learners' groups, it was noticed that there were different posts where netiquette had been disregarded. We called this theme *netiquette*, under which some subthemes were also recognized; they are as follow.

- ***Mocking language***

There were several posts containing words which meant to make fun of other people. It often occurred when group members did not agree with each other. As an example, in one of the teachers' groups, there was a post concerning a TTC course and offering a new teaching method, which was followed by some mocking posts:

- ***When Kumar (Kumaravadivelu) talks about teaching methods, he gets shocked, how simply these guys create methods.***
- ***Either they don't know the meaning of methods or they suppose people as stupid.***

**Table 1.** Common Themes in Observations

<b>Main Themes</b>	<b>Subtheme</b>
<b>Netiquette</b>	Mocking Language Quarrels and Heated Arguments Impolite and Colloquial Speech Subjective or Unsubstantiated Claims Impolite and Colloquial Speech Reminding Netiquette
<b>Non-Academic Conducts</b>	(In)appropriate Reactions or Behaviors Disappointing Words
<b>Redundant/Useful Posts</b>	Monopolizing Chats Opinions on Every Subjects Useful posts
<b>False Information</b>	

In another example, in one of the learners' group, somebody asked the group about how to study a textbook, which was followed by such responses:

- *In the name of God, open the book and study.*
- *Hello, English is something that you must study, in this way you must study.*

This was followed by another response from the first inquirer:

- *Really? I thought it is injected.*

Netiquette implies that it is not ethical to hurt people in virtual, as in real, settings (Shea, 2004), particularly in online public contexts where all interactions are seen by many people.

- **Quarrels and heated arguments**

In both groups, several discussions ended in quarrels and resentments. For instance, in one of the students' groups, a conflict started when a user sent a post about men's and women's talents. This was followed by several pages of verbal conflicts such as the following samples:

- *First, ladies, not women. Second, everybody has a kind of talent. Don't prescribe the same medicine for everyone.*

- *Now start fighting again.*
- *He is kidding. Don't get upset.*
- *You should joke with a person who jokes with you.*

Similarly, several discussions gradually grew to quarrels in one of teachers' groups. They triggered the following comments:

- *We discuss a subject, why everybody is in a quarrel? Everybody is nervous.*
- *I wish there was less squabble in the group. Every time we visit the group, there is dispute and clash.*

Despite all these annoying arguments, digital citizenship highlights the importance of netiquette in communications (Kozik & Slivova, 2014), according to which, online users should be patient and forgiving (Shea, 2004).

- **Subjective or unsubstantiated claims**

Although technology users are advised to think twice when communicating online (Scheuermann & Taylor, 1997), several posts in both learners' and teachers' groups were based on members' personal ideas or impressions, without being supported by valid evidences or sources. Here are some examples from the two groups:

- (concerning the PhD interviews in universities) *Definitely all these interviews are money making and all professors have chosen their students to be accepted beforehand.*
- *Believe that these new teachers in ... (name of a very famous institute in Iran) are just good at tests and written exams, ... they do not have a proper pronunciation, not a correct teaching method.*
- *We don't have anything named testing method.*
- *All graduates go and work for Snap (an online taxi service).*

- **Impolite and colloquial speech**

Although the groups were created for academic purposes, slangs and colloquial language were very widely used, as in the following examples, although most samples under this subtheme cannot be mentioned for courtesy concerns.

- *Your opinion is respected for yourself.*
- *Gosh! Is dentistry a job? They are always in the people's mouth.*
- *Hell with University exam...*

- ***Reminding netiquette***

Despite overlooking netiquette in both groups, several members insisted on taking the rules of online ethics into account, and they were quite observant themselves, as in the following examples:

- *I didn't have an inappropriate reaction. If I had, I apologize.*
- *Friend! Can I have a kidding with you?*

### ***Non-academic Conducts***

As was mentioned before, all observed groups had been created for academic interactions, and they had set some rules in advance, such as refusing unrelated posts, ads, requests for books, articles, or slides which are available elsewhere, etc. There were, however, many posts which were not congruent with group objectives and rules, as explained in the following subthemes.

- **(In)appropriate reactions or behaviors**

Under this subtheme, some issues were identified including leaving questions unanswered, disclosing members' names and correcting and criticizing members with unpleasant words. As an example of a conduct inappropriate for an academic setting, we can refer to an instance when a user in a teachers' group asked for a book. This request which was against the group rule was responded even by a worse reaction when another user condemned her request using harsh words, while addressing her through her name. This was the case in learners' groups too, as in the following examples:

- *Does anybody have the link to the group?.... Nobody answers? .... Look, when a girl asked a question, 10 people answered. We asked a question, nobody cared...*
- **Disappointing words**

Despite the groups' objectives to encourage scientific discussions, a large number of posts magnified pitfalls of EL education in Iran and were likely to instill despair and discouragement, as in the following examples from teachers' and learners' groups respectively:

- *All around the world, the PhD course is getting more specialized, so everybody can study and have activity based on their own specialty. Here they are acting vice versa...*
- *Here is not Norway, Switzerland, and America. Here is Iran. How can you expect Konkoor to be right when nothing is right in Iran?*

### **Redundant/Useful Posts**

It was noticed that users frequently sent posts about trivial or everyday events, personal ideas and long or repetitive discussion on the topics which were quite irrelevant to groups' purposes. Such posts occupied huge spaces, and the important posts were likely to be lost in between. Examples under the following subthemes may clarify the point:

- **Monopolizing chats**

Some members sent posts to one or a limited number of people in the group, as if the group is their monopoly. This took other members' time, groups' space, and was disrespect to others' rights. Here are excerpts from a teachers' group:

- *Hello, how are you? Do (will) you go to Kharazmi (university) tomorrow?*
- *Hi dear Mojtaba, yes brother.*
- *Come on, go there on Wednesday. Then, I come and see you...*

- **Opinions on every topic**

Several members felt free to start a variety of topics, and leave comments on almost all posts, as in the following examples:

- *The salary you wrote about is unbelievable....*
- *God's great. Don't worry....*
- *Music is different from physics, biology, and chemistry.*

There are not any official guidelines about ethical norms in online settings (Christensson, 2017), but people are highly recommended to be attentive to others' time (Shea, 2004).

- **Useful posts**

Despite the huge number of posts which disregarded the norms of behavior in social networking contexts, a good number of members were concerned about useful and effective contribution to group discussions. In fact, publishing useful content in online circles is a part of the responsibility of every digital citizen (Ribble, 2012), as the following posts mean to fulfill this goal:

- *You can text the (group) administrator, and this is her Telegram ID...*
- *Friends, for free English language consulting, you can go to this site address ....*

### **False Information**

Some users posted what they were not sure about, or answered others' questions based on what they guessed. Posting an uncertain piece of data that might result in misinformation circulation can be a sign of DC unawareness (Ribble, 2012), as in the following examples from one teachers' group:

- ***If the father is martyr, his child straightly goes and sits on a chair in Tehran University even if s/he gives the answer sheet blank.***
- ***TELLSI is canceled in Isfahan and will be held at Khatam University in Bahman.***

### ***Themes extracted from teacher groups' observations***

More scrutiny into the data revealed some themes in teachers' groups, which are displayed in Table 2. It is noteworthy that they were occasionally present in the learners' data as well, but the frequency was too limited to be taken as a theme.

**Table 2.** Observation Themes in Teachers' Groups

<b>Themes</b>
Sarcastic Language
Trivial Requests
Academically Illegal Affairs
Hunches and Speculations

- ***Sarcastic language***

Using sarcastic speech might reveal that users were less patient or respectful towards each other. Netiquette guidelines (Christensson, 2017) require users to care more about their language to have a more effective interaction. Sample teachers' and learners' posts including sarcasm are presented below:

- [In response to some users who devalued a professional course announced in the group] ***Respected professors and scientists, it seems that your "great" knowledge doesn't allow you to think and differentiate the topics...***
- ***We were waiting for your favor of commanding, sir...***

- ***Trivial requests***

There were many instances of trivial questions asking for addresses, dates of some events, English equivalents of Persian words, concepts in ELT, papers on a topic, games, and the like, while all these could easily be found on the Web, and some of them occupied a huge space in the group. Some examples are as follow:

- ***Send me some ISI articles concerning the effect of games on language learning.***
- ***Do a favor and send the books by Ellis, 2003, 2005, 2009, 2011, 2012.***

- **Academically illegal affairs**

Several posts were about illegal actions/claims such as writing thesis, articles, and books for others; publishing articles in ISI and ISC journals through favoritism; selling the questions of PhD comprehensive exams, and the like:

- *There is a lot in Enghelab, as you walk they come to you and ask if you want a thesis, ISI article, 2020 books in pdf...*
- *I want an article for an advanced writing course 3000 words without plagiarism for tomorrow. Otherwise, I will fail. . . . About English teaching. . . .*
- **Hunches and speculations**

There were several posts including hedging terms such as *I think, it seems, I don't think*, and *as if*, which indicated that users were talking about an issue about which they were not sure. Sometimes, these hunches occupied several pages, without eventually revealing the truth about the issue:

- *It seems that the TELLSI conference has been cancelled.*
- *I don't know. A friend of mine had received a link....*
- *He called and (they) said that it had been dissolved.*
- *It is likely to be totally canceled. I think it's not held this year.*

### Themes Extracted from the Learner Groups' Observations

In addition to themes common between teachers and learners, the following themes were prevalent in learners' group. This does not mean that they were absent in teachers' posts, but they were so infrequent that we could ignore them among teachers.

**Table 3.** Observation Themes in Learners' Groups

Themes
Incorrect Writing
Abundance of Kidding
Narrating Daily Events and Personal Stories

- **Incorrect writing**

Learners very often misspelled words, as in “raasmige” which means “(s) he is right,” in which “t” at the end of “raast” has been dropped<sup>1</sup>. Such new ways of writing on social media can result in language distortion (Johnova, 2004). The poor spelling and grammar that is seen today in social media are the outcomes of repeated mistakes and widespread acceptance of such mistakes.

- ***Abundance of Kidding***

Despite the group objectives, so many jokes, and banter were exchanged. Sometimes, most of the page screens were occupied with jokes and related emojis. There were many users who had no contribution to group activities, save sending jokes or making jokes out of exchanged posts.

- ***Snap recruits drivers from all majors and all universities.***
- ***Chomsky was asked if Azad University is worse or National University? He answered, “uninvited guests in Nowrooz.”***
- ***Narrating daily events and personal stories***

Narrating personal stories to all members in the group was another practice among English learners. Here is one sample:

- ***I (have) started studying for two weeks. The first week I was excellent but the second week I studied very little. Now I am desperate.***

### **Interview Themes**

After collecting the data through observation and going over the notes several times, these major themes emerged that shaped the basis of the interviews (Table 4):

**Table 4.** Interview Themes

Fallacy of No Regulations on the Web
Proper Use
Effective Use
Digital Citizenship Instruction

The observations were followed by semi-structured interviews with ten volunteer participants from any of the teachers’ and learners’ groups. Delving into the transcribed data resulted in extracting a number of themes in each group. More scrutiny revealed that interviewed teachers and learners were very similar in terms of their DC awareness and practice. As a result, the following themes were decided to be the main axes of the interview findings:

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<sup>1</sup>More examples in Persian are: *چنتا (چند تا)، اصن (اصلا)، عا یا (آ یا)*.

- **Fallacy of no regulations on the Web**

Most of the interviewed users believed that there were either no regulations concerning technology use in Iran, or limited rules were present without being implemented. Some highlighted the need to pass some restrictive rules regarding the use of digital technology:

(Mr. Khoshbin): *Wherever there are some rules, neither are they enforced properly, nor is there any authority to monitor their implementation.*

(Ms. Honarvar): *To be honest, there are not any rules in our country. Recently Fata [cybercrimes] police are making some laws about digital crimes but people are not familiar with them in general.*

(Maryam): *In my opinion, there aren't any specific rules. It is up to individuals to decide what is proper, and basically needed.*

(Zhaleh): *I think it's free and there is no rule. There might be limited rules, but nobody cares.*

- **Proper use of technology**

The interviewees' statements which centered on *the way people behaved in online contexts, using digital devices in academic settings, and free downloading* were put under the broader theme of *proper use of technology*, as it is exemplified here:

(Mr. Alipour): *In the real-world we watch out more, the speech is more polite. But it is not the case in the virtual space... It is improper to insult others, though. Because there is no supervision in the virtual space...., they think they wouldn't be responsive, and nobody will probe them.*

(Mr. Khoshbin): *I myself use a cell phone in class to visit the social media and read the news. I often give students exercises and check my cell phone.*

(Sayeh): *I have frequently seen teachers and students use their phones. Students watch films, and talk on their phones with hands-free. They do this recklessly, even they don't care when the teacher looks at them.*

(Mr. Zabihi): *There is no problem with downloading books, films, and the like for free...especially for academic goals.*

- **Effective use of technology**

Under this theme fall series of statements in our data, regarding the ability to find reliable sources, knowledge of cyber safety and cyber security:

(Ms. Ahadi): *I take the articles from valid journals. I use the sites that my colleagues use more.*

(Mr. Dusti): *I've just heard about online safety. I've never done anything to address it...I don't know much.*

(Hedyeh): *.... Mostly I use Wikipedia when googling, because I've heard it is more reliable compared to other sites.*

(Anahita): *I don't know much about security on the Web. I just know that I should lock my page and not follow the people [whom] I don't know.*

- **Digital citizenship instruction**

It could be understood from the teachers' and learners' statements that digital citizenship issues were poorly addressed in educational settings. All participants emphasized on the need for DC quality education. Here are some examples:

(Ms. Fatemi): *I haven't taught it, because it was not related to my field.*

(Mr. Alavi): *I've talked mostly about misusing credit cards, online payment, fishing, and ethical safety, especially on the Internet.*

(Ava): *At school, they [teachers] just tell us not to use virtual space a lot, nor to trust others. They don't talk about which groups to join, and how to behave there....*

## **Discussion**

Although similar studies in TEFL social networking platforms with such detailed findings are missing in the DC literature, the results of the present study can be reviewed with an eye to the previous studies. In this research, what was evident in both teacher and learner groups was the lack of proper DC knowledge and practice. This indicates that DC training has not adequately been offered to teachers and learners despite the rapid growth of digital technology and its wide daily application. While teachers are expected to teach students the appropriate use of technology (Ribble & Miller, 2013) and to advocate and model safe, legal, and ethical use of digital information and technology (ISTE, 2012), they can hardly address this need so far as they themselves are unaware of DC. This was similarly notified by Pusey and Sadera (2012) who found that when teachers do not have the ability to provide DC instruction to learners, schools encounter challenges in helping students learn the digital citizen's regulations.

Moreover, the results of this research corroborate with some studies (Chik, 2011; Nelson, Courier & Joseph, 2011; Pusey & Sadera, 2012; Rosaen & Terpstra, 2012; Sincar, 2013) which indicate that teachers lack enough awareness and skills of incorporating technology in their profession, and they do not put enough time and energy to learn it. One cannot expect teachers who deliberately avoid using

technology in the classrooms (Chik, 2011) to promote DC among learners. In all, our findings especially those obtained from the interviews support the results of these studies in that there needs to be a change in the mindset of English teachers with regard to learning both digital techniques and DC knowledge and skills. In other words, our teachers need promote both their technical and DC skills.

Looking at the issue from another perspective, some researchers hold that as DC knowledge is improved among teachers, they tend to incorporate digital tools and DC discussions in their classes more readily (Ashmeade, 2016). So far as social networking is concerned, although some researchers report that using social networking sites for educational purposes significantly impacts teachers' DC perceptions (Choi, 2015), this was unlikely to be the case with our teacher participants since despite their frequent use of social networking platforms, they did not follow DC norms.

Despite the establishment of several DC models in the world, most of our interviewed teachers and learners believed that there were either no regulations concerning technology use in Iran, or limited rules were present without being implemented. This seems to be the case in countries other than Iran since other studies show that Internet users are more cautious and rule-governed in real settings compared to online ones (Payne, 2016), "interpreting online collaborations as less real than offline collaborations" (Flores & James, 2013, p. 847). Since this study revealed that anonymity and adopting fake identities encourage crimes and unethical behaviors on the Web, users need receive instructions regarding the forcefulness of DC rules, rights, and responsibilities, just like those in real world.

So far as EFL learners are concerned, their recognized unethical and unsafe misconducts on the Web, has been the concern of other researchers (e.g., Boyle, 2010; Ribble, 2015; Ribble& Bailey, 2006; Winn, 2012). As a solution, they have suggested the instruction of netiquette as a part of DC and emphasized on the fact that utilizing various electronic devices does not make learners skilled users of digital technology. The findings of this study verifies their assertion that learners have the ability to play with technology but not to use it efficiently (Bullen, et al., 2008; Kvavik, 2005). This lends support to Ribble and Miller (2013) who found that "technology users of different ages are now reaping the advantages, as well as the problems, that go along with more than a decade of fast-developing technology, without instruction regarding the proper use" (p. 136).

In sum, this research corroborates with previous studies (e.g., Berson & Berson, 2003; Famer, 2011; ISTE, 2007; Mattson, 2016; Ribble et al., 2004) in highlighting the need for including DC instruction in school curricula right from early years of education - not toward the end or general schooling at senior high school - both to enhance appropriate and effective use of technology and to avoid potential risks of online environments such as cyberbullying, hacking and phishing. Given the fact that most Iranian EFL users of digital technology are young people, i.e., digital natives, the future of our society will be influenced by their actions as well as by the way the EFL teachers adapt to the shifting social realities. Therefore,

investment on DC must be part of the educational policy of the two EFL generations and the coming ones.

## **Conclusion**

This study was an effort to explore DC perception and practice among selected groups of Iranian EFL learners and teachers. The first set of results including the observation themes common among learners and teachers revealed that despite their widespread use of digital technologies, Iranian EFL teachers and learners generally lacked the DC skills to a large extent. Although there were differences in the types of their misconducts and misconceptions on the Web, both groups were almost unaware of *netiquette*, *requirements of online academic settings*, and *redundant or false information threats*.

So far as the EFL learners are concerned, this research reported violation of DC rules in a series of misconducts such as *incorrect writing*, *abundance of kidding*, and *personal unrelated stories*. In a similar vein, teacher participants displayed some misbehaviors on the Web, which were not that common among learners. Their posts including *sarcastic language*, *trivial requests*, and *academically illegal affairs* underline the urgent need for new approaches to teacher training and CALL courses and new demands of education in digital age. Evidently, they need enhance their DC skills if they mean to function efficiently in their academic and professional activities, and in their responsibility towards their students.

This lack of true understanding of the requirements of digital spheres, as was depicted in the findings, is the outcome of several forces such as new waves and rapid growth of digitalization in recent years, for which the Iranian EFL community are not well-prepared. To this, one can add the lack of required regulations as well as the need for awareness of the national and international DC codes, as the participants plainly declared. Accordingly, this study highly recommends rethinking the required rules and regulations according to the contemporary needs of pedagogic settings, as well as setting the ground for educating teachers and learners at different levels of schooling and even higher education. Evidently, DC cannot be obtained in TEFL and other Iranian settings unless every single user of digital technology learns and implements DC skills.

The results of this enquiry have implications for researchers, curriculum designers and materials developers, policymakers, learners, and teachers. Highlighting the significance of the concept of digital citizenship, this study encourages researchers to explore cultural, social, psychological, political, and security facets of DC in Iranian contexts. The outcomes of such studies can help policy makers devise local DC rules and norms, which itself paves the way for curriculum designers and materials developers to include them in our education system. Moreover, stressing on the urgent need for explicit instruction and committed practice of DC skills, this study can show the policy makers the DC areas which are most troublesome in our EFL settings. It also makes learners and teachers

aware of the importance of DC knowledge and practice in their academic, personal, and social lives.

This research was delimited by its focus just on a social networking platform and on the practices of English teachers and learners. This was due to the popularity of social networking for EFL educational purposes and the significance of DC for EFL learners and teachers because of their large application of digital tools for English education and their interactions with technology users over the globe. However, further studies can take care of DC practices in other digital spheres, platforms and instruments, in isolation or in a comparative way. In addition, multimodal message types like videos, emojis, animated stickers, and images were not analyzed here due to manageability reasons. They can be explored through discourse and image analysis in future studies. In addition, we analyzed just the learners' and teachers' perceptions and practices. It is essential to investigate the attitudes of other TEFL stakeholders including policy makers, curriculum designers, and materials developers towards DC.

Lastly, since the contemporary DC models have been developed on the basis of the culture, values, and rules of western nations, we need develop DC which has its roots in our local legal and political system and socio-cultural values. The DC which is expected to be integrated into our education system needs be (re)defined with regard to our local as well as international norms and rules to address the internal and international needs of EFL learners, teachers, and all Iranian technology users.

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