

# INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH

2021, Vol. 2, No. 7, 557 - 564

<http://dx.doi.org/10.11594/ijmaber.02.07.03>

---

## Research Article

### A Critical Review of the Impacts of Digital Citizenship on Teachers and Students' Educational Development

Mohammad Naim Rahim<sup>1\*</sup>, Awista Zare<sup>2</sup>

<sup>1</sup>Kunduz University, Kunduz, Afghanistan

<sup>2</sup>Los Angeles Valley College, California, USA

---

#### Article history:

Submission July 2021

Revised July 2021

Accepted July 2021

#### \*Corresponding author:

E-mail:

[mnaim.rahim@gmail.com](mailto:mnaim.rahim@gmail.com)

#### ABSTRACT

The teachers and students' engagement on Facebook, Instagram, WhatsApp, Telegram, and other online and offline platforms for the purpose of teaching and learning are considered as digital citizenship in education. These social media have also exposed the users to admit several rights and mutual values. However, the enhancement of technology has motivated these citizens not only to communicate across the world but also to build platforms to practice and learn new knowledge and skills. This article is proposed to review the impacts of digital citizenship on teachers and students' educational development. Therefore, a critical review of the literature is conducted. The data is collected using Google Scholar with the scope of the topic and the criteria mainly between 2011 to 2021. The data analysis procedure and identifying codes, patterns, and similar themes have motivated the authors to present and discuss the results and findings thematically. The results show that the fundamental elements of digital citizenship are the internet, technological tools, social media, and responsible behaviors of the users on the platforms. The findings also indicate that the development of information communication technology and virtual practices are serving digital citizens to be involved in many related and unrelated activities which need to be controlled by an authentic policy. Since the growing technology of the world is transforming the paradigms including the students' needs, the layout of the classrooms, and the stakeholders' requirement for employability. Investigating these continuing needs contributes to the efforts to lead the information communication technology integration into educational circumstances and address the local and national policies, facilitating the infrastructure, enhancing the educational settings, cybersecurity issues, and privacy accountability among educators and the learners.

**Keywords:** *Digital Citizenship, Teachers' Role, Students' Role, Educational Development, Social Media.*

---

#### How to cite:

Rahim, M.N., & Zare, A. (2021). A Critical of the Impacts of Digital Citizenship on Teachers and Students' Educational Development. *International Journal of Multidisciplinary: Applied Business and Education Research*. 2 (7), 557 - 564. doi:10.11594/ijmaber.02.07.01

## **Introduction**

For many years, students have been taught through the traditional teaching methods in Afghanistan. Due to the political concerns and poor educational situation in the country, they did not know much about modern methods of education and this had also deprived the generation of standard education. The grammar-translated method was one of the most popular teaching methods which have been used as a common learning method, as schools and universities have been traditionally preserved for many decades until today. However, there are many modern methods of teaching and learning as blended learning approaches and 21st-century learning muddles globally. These methods have not only prepared the students for 21st-century learning but also fulfilled their needs in the global marketplace. Since a paradigm shift has accrued in the content and context of education in the world, and this paradigm shift requires educational institutions of Afghanistan to align with the new norms of education to address the authentic needs of the learners.

In the age of artificial intelligence and information communication technology, digital citizenship has evolved from traditional settings of the classrooms to luxury necessities in every society today. The educational institutions are commoditizing access to the internet and technological tools, teachers and students are cultivating strong connections within cross-culture platforms across the world, and technological skills have become the cornerstone of employability requirements, much like language fluency. In the context of Afghanistan, however, the civil wars and poverty through decades have limited the access of the generations for a standardized education, but the new phase of democracy and government building since 2001 has provided the new generation with some of the facilities that other educators and students have accessed in the world. Currently, nearly one in five students at public and private universities of Afghanistan having a smartphone, access to the internet connection, and technology literacy, therefore, they are the new digital natives.

On the other hand, certifying that educators and learners have understood the implications,

consequences, and best practices for engaging with technology and social media is critical to higher education institutions since limited studies are focusing on this issue. By some means, the students are digital natives since they have grown up in the age of artificial intelligence and information communication technology. They are also instinctively competent with the fast streams of these technologies. But the teachers are considered to be digital immigrants and new to technology, as in most of the universities of Afghanistan the academic staff are facing a lack of ICT literacy and technological skills. Indeed, many teachers as an old generation are adopters of the new technologies rather than understanding the exact enhancement of these digital tools.

In addition, many studies indicate that the technological knowledge of teachers and students correlates with each other. According to Kim and Choi (2018), students as digital citizens should have enough skills and knowledge of technology to be capable in the world of digital. The study adds that teachers are also responsible for leading the students to become digital citizens. As stated, students need to have input and there should also be a support system that should guide the learners to benefit the digital citizenship. However, there is not any existing study in the context of Afghanistan to show the digital citizenship skills of the teachers to precisely focus on learners, so the educators do not have any specific criteria to provide the learners with skills and knowledge of digital citizenship. This issue has led to challenges in setting the educational goals and objectives of digital citizenship in the higher education of Afghanistan.

Moreover, the theoretical range of being a citizen is not anymore narrowed to that of the traditional definition which has emphasized the rights and responsibilities of citizens. There are criticisms to redefine the concept of citizenship aligned with the needs in the 21st century where information communication technology and artificial intelligence have been integrated into the lives and professions of the nations continuously. Therefore, the term digital citizenship has developed, whereas, the use and definition of this concept also vary from country to country. A study in the USA stated that

digital citizenship in education refers to the accountable practices of technology by anyone who uses computers, the internet, and digital devices to engage with educational context on any level appropriately (Ribble, 2017). This indicates that the term digital citizenship in education discusses the proper use of technology and how it impacts teaching and learning circumstances.

In the context of Afghanistan, digital citizenship in education discusses the potential use of technology including online and offline platforms in teaching and learning at schools and universities. The integration of technology in education is also an essential factor to help the learners in Afghanistan to achieve and understand technology literacy as well as providing them with 21st-century learning, e-learning, and digital responsibility (Rahim & Sandaran, 2021). Therefore, digital citizenship in education is a highlighted feature for the future of teaching and learning in the country. It is also important to put digital citizenship on first of the list for the future of education in Afghanistan. However, the absence of authentic results of the studies has been devoted to the comprehension of digital citizenship, particularly between schools and higher education institutions in Afghanistan. Whereas, digital citizenship supports educators and learners to participate critically and effectively in a context that has been filled with social media and digital technologies.

Despite this, there are also fundamental steps to use and integrate digital citizenship in schools and universities of Afghanistan to facilitate educators and learners with the objective potentials of technology. Today, everyone is engaged on social media and this engagement has motivated the students to learn a new language, improve writing skills, and enhance communication competencies (Searson, 2015). Currently, students who are digital citizens can produce structured text using applications like WhatsApp, Telegram, Facebook, and other social media platforms. In addition, they can use PowerPoint or Prezi to prepare their presentations and class assignments (Hava, 2018). Thus, these social platforms have integrated the traditional face-to-face classroom with

modern digital citizenship integrated education that has also gained the interest and motivation of the educators and students. This technology-integrated education is also prioritized by educational policymakers which require further investigations to establish an in-depth understanding.

Therefore, the current article is aimed to review the impact of digital citizenship on teachers and students' educational development. Investigating the highlights of literature on digital citizenship contribute in terms of the definition of digital citizenship, teachers' roles as digital citizens, students' roles as digital citizens, identity issues of digital citizenship, and integration of digital citizenship in education. This will provide an authentic understanding of the digital citizenship and educational paradigm shift for the teachers, students, educational institutions, and stakeholders in the context of Afghanistan. Since there is no specific study that has advanced the use of digital citizenship in education in the country. This contributes to providing an authentic understanding of digital citizenship and education to help teachers and students to focus on online activities at school, universities, and to integrate enriched internet browsing and applications for the inside and outside use of the classrooms through reviewing outcomes of the study.

## **Literature Review**

### ***Definition of Digital Citizenship***

A range of theoretical notions has included the concept of digital citizenship. Some of the scholars have underlined the technological aspect of digital citizenship while others have examined the impacts of social media to propose new systems of citizenship. Reviewing the research studies of the investigators in a variety of fields like communication, education, and political science, the article identified that scholars have suggested different origins of the term digital citizenship. Therefore, this study presents and discusses some of the highlighted definitions including the perceptions of the article on digital citizenship. The study also discusses how digital citizenship develops the educational practices between teachers and students at schools and universities.

With the emergence of the concept of digital, an interest in digital citizenship has been initiated and researches on the scope of digital and digital citizenship have continued. One of the traditional definitions of the concept of digital citizenship can be assorted as responsible behavior on online platforms (Kim & Choi, 2018). This definition includes the ethics of admitting the rights of other users and being responsible for your behaviors to enhancing mutual values and considering intellectual property rights in online settings. As Simsek and Simsek (2013) stated that technology literacy has been emphasized by many studies. This literacy is involved inclusive terms such as user-friendliness to social media and events in a variety of devices, transforming with developing technologies, and organizing issues relating to digital security.

In brief, digital citizenship can be defined as the active participation of teachers and students via authentic online and offline platforms to produce output in sociocultural practices rather than passive learning or knowledge memorization. This learning process through digital citizenship should also enable the teachers and learners as digital citizens to improve decision-making and learn leadership skills (Ribble, 2017). As the internet and social media are filled with fake information, the process of learning and production of knowledge should also competently enable the learners to distinguish the fake information from the authentic use of digital literacy and information literacy (Rahim, 2021). Hence, digital citizenship in education is the responsible participation of learners and educators on technological platforms and the potential impacts of these platforms on teaching and learning.

### ***Role of Teachers as Digital Citizens***

Educating through the potential use of social media and technology is not basically about facilitating learners with these tools, but also engaging the students for a life that has enhanced with abundant knowledge and constructive skills. According to Kim and Choi (2018), in educating learners to develop appropriate citizenship in the digital world, some specific criteria for defining the level and scope of education must be established by educators.

The study adds that If there are no specific principles for the students to follow, the education circumstances will remain ineffective. Concerning this, several studies have also highlighted the role of teachers as digital citizens who are not serving only as a facilitator of knowledge and skills anymore, but as role models, mentors, and guide of digital accomplishments (Jones et al., 2014; Kim & Choi, 2018; Ribble, 2017).

In addition, technological advancement has been changing how information is formed, conversed, and construed in the past few decades (Hava, 2018). Therefore, the role of teachers is also shifted from the corner stage of the classroom into the authentic involvement of the students' practices and promotions. According to Yuan et al. (2019), the internet, social media, and digital citizenship have provided a wider series of prospects for the literacy practices of the teachers. Based on this study, digital technology has transformed social activities and has redefined literacy. These changes have led to transformative implications for the educational environments which also require teachers to provide an authentic understanding of new literacies for the learners.

Furthermore, Yuan et al. (2019) stated that despite the immigrants' waves to the US, concerns on the system of school and growing bilingual learners have received high attention. This indicates a dynamic role for teachers to address the diverse-culture classrooms as well as meet the needs of the learners through the potential use of social platforms. This need recommends a more suitable teaching and learning pedagogy that embraces the cultural identities of learners and empowers the teachers as critical users and producers of information (Yuan et al., 2019). Therefore, the role of the teachers as digital citizens is crucial and teachers should focus on this potential influence of developing the knowledge and skills of the learners in the age of digital citizenship.

### ***Role of Students as Digital Citizens***

According to Gleason and Gillern (2018), students increasingly spend an average of 6 hours on online platforms per day. This online participation of the learners must develop skills that enable the students to find, evaluate,

and share information responsibly. It should also involve the students in constructive dialogues with diverse cultures, and ensure that the participation of the learners is safe, ethical, and legal. Despite the significance of learners acquiring these skills, facilities in formal and informal learning platforms for digital citizenship have lagged unexplored (Gleason & Gillern, 2018). A study by Yuan et al. (2019) stated that the increasingly inclusive society setting and the rapid change of technology have assigned a supportive role for the English language learners to be technology literate to engage for a future in which learning new technology is an ultimate need of the education.

Similarly, a study in the USA identifies standards and organizes seven groups of roles for the learners as fundamental skills and knowledge to actively participate in a digital society. These roles are included empowered learners, digital citizens, knowledge constructors, innovative designers, computational thinkers, creative communicators, and global collaborators (Frau-Meigs et al., 2019). However, a study by Jones and Mitchell (2015) also stated that learners with youth age have decreased online respect scores. These scores on both subscales are higher among girls than boys. The study stated that both social media values and civic practices have negatively associated with online harassment performance and have positively correlated to helpful bystander behaviors. Therefore, the role of the learners is crucial as social media practitioners to develop skills, knowledge, and mutual values as well as digital citizens to consider the rights and cyber privacies.

### ***Identity Issues of Digital Citizenship***

The users' identity in the world of digital technology is a critical issue today. This is not only an issue in countries like Afghanistan but there are several cases of the misuse of personal data of the users that have treated the individuals who live in the USA. According to Gleason and Gillern (2018), due to the parents, teachers, administrators, and schools embracing the notion of teaching students about technology literacy, safe and responsible use of the internet, digital citizenship is again in the news in the USA. The study also adds that due to

apparent threats of social media life, including sexting, harmful contact, and cyberbullying dangers, some states like Washington, California, and Texas have planned or have approved rule passion that educates learners in formal education about how to practice information communication technology effectively to preserve learners' security, privacy, and welfare recently. According to another report, 72% of individuals aged 12-17 who had been bullied in 2009, have recommended that young individuals need to learn effective strategies to be safe on online platforms in the USA (Livingstone & Brake, 2010).

In addition, Kelly (2011) stated that during the last 1000 years, technology has grown about 1.5% per year. This enhancement of technology makes our lives different from the past. Today, it is not easy to deny the influencing potentials of technology on every surface of everyday life. One may follow his/her ways to approach the daily routines, but technology will ultimately enforce the process of changing things. So far, the theory of (technological determination) is developed by the fast streams of technology that are engaging our lives in society. This is also aligned with some of the critics. One of the issues that nations may worry about is emotion recognition and computer vision skills which are empowered by AI (artificial intelligence). According to Harari (2019), the upcoming technology will enable the governments to take their monitoring systems from a surface which the observation on CCTVs and other available devices to the hidden levels of lives of citizens with the help of artificial intelligence technology. This will ultimately cause an identity issue for digital citizens and will violate their privacy.

On the other hand, many associations are serving to observe the privacy protocols of the companies that are working on technology sectors globally. According to the third quarter of the Surveillance Technology Determination Report (2020), 71 requests for privacy review have been received this year. From the total of 71 requests, 39 of these technology projects were applicable to be considered. The report stated that none of the 39 were determined to be surveillance technologies. Therefore, the current study can also agree with Kelly's

(2011) view of the point that individuals should be ready to work with the best of technology rather than ignoring the enhancements that it brings to humans' lives. Similarly, Harari (2019) also indicated that there is no way to ignore the inclusive development of technology unless individuals should know it and make it morally address the excellence and fit the present and the future of teaching and learning.

**Integration of Digital Citizenship and Education**

Digital citizenship and practices on social media positively improve the critical thinking skills and emotional skills needed for teachers and students (Rahim, 2021). The study also indicated that social media positively reinforces the active participation of both teachers and students. According to Gleason and Gillern (2018), digital citizenship also reflects on how social media applications back up digital citizens' in primary and high school to learn new knowledge and skills. The study highlights that high school students improve skills and knowledge facilitated anytime and anywhere using digital technologies. The study also suggests that both modules of digital citizenship including the online practices at schools and out-of-the-school activities have to be incorporated with a social media integrated curriculum. Therefore, the integration of social media in teaching and learning is recommended to teachers, students, practitioners, parents, and educational institutions.

According to Alazemi et al. (2019), digital citizenship has a statistically significant impact on students writing performance. Studies also suggest that learners need both cognitive and non-cognitive competencies which are provided through digital citizenship. As a study

stated that students in the age of technology not only require core cognitive skills but also they have to be competent with virtual platforms competencies (Richardson & Milovidov, 2019). Al-Zahrani (2015) also perceived that learners have better altitudes of technology, computer skills, and digital literacy, especially in valuing mutual respect on social media. All these investigations indicate that there is a potential to integrate digital citizenship and education to develop teachers and students' educational performances.

On the other hand, a study in the USA stated that schools and universities have underlined the negative features of technology and how it is misused by users (Walters et al., 2019). Similarly, Zhong et al. (2021) stated that understanding the influencing factors of technology is key for the effective reduction of cyberbullying. According to this study, these influencing factors include the individual level of learners and have classified cyberbullying between learners in the college into five sublevels. These factors included the learners' background, the use of social media addictions, personality, emotion, and digital citizenship literacy. Fernández-Prados et al. (2021) also stated that learners' online addiction length should be incorporated if digital citizenship is measured. However, the results of another study by Rahim (2021), have shown no significant difference examining the mean scores between 3 semesters GPA of postgraduate students who are using social media. This study has also not observed a correlation between the time spent on the use of Facebook as social media and the mean scores of students during 3 semesters (Rahim, 2021). Therefore, the potential integration of social media for enhancing teaching and learning is recommended.

*Table 1. The Impacts of Digital Citizenship on Educational Development*

Sources	Educational Implication of Digital Citizenship
Kim and Choi (2018)	Digital citizens are required to have a broad understanding of technology and potential skills of the internet and digital tools and teachers are responsible to guide the learners towards digital citizenship.

Sources	Educational Implication of Digital Citizenship
Gleason and Gillern (2018)	The use of technology in both types of educations such as traditional face-to-face education and digital citizenship education can be integrated through a social media-facilitated curriculum. Therefore, the study endorses the use of social media in educational development for educators at schools and universities, educational experts, parents, and scholars.
Alazemi et al. (2019)	The study has shown a statistically significant influence of digital citizenship on students' writing performance. Digital citizenship is molded in this study for meaning-making in the writing activities of the students. As a result, students have produced well-structured essays.
Walters et al. (2019)	The study indicates that educational institutes have accentuated the negative aspects of digital citizenship and the misapplication of technology by teachers and students. The study recommends enhancing digital citizenship education to prepare the learners for the appropriate, responsible, and ethical use of technology.
Zhong et al. (2021)	The results of this study have shown that there is a low level of cyberbullying among Chinese students at colleges. The study also indicates that factors such as gender have a significant impact on cyberbullying. In terms of social media addictions, learners' average use of social media daily has no significant correlation with cyberbullying; however, the time of using social media for the purpose of non-academic has a significantly positive correlation with cyberbullying.

Table 1 shows the highlights of the related studies discussing the impacts of digital citizenship and the implication of social media in the educational development of teachers and students. It indicates that digital citizenship knowledge and potential technology skills of teachers and students are crucial to enhance their appropriate, responsible, and ethical use of technology for the purpose of educational development.

### Conclusion

In brief, the rapid enhancement of technology, the potential use of social media, online teaching, and e-learning environments have become widespread at schools and universities globally. However, this educational paradigm shift has motivated teachers, students, and educational institutions to redefine their objective goals during the Covid-19 pandemic. Basically, digital citizenship is a growing element of 21st-century learning and has enhanced the potential knowledge and skills of teachers and learners. Therefore, the present article has

reviewed the impacts of digital citizenship on teachers and students' educational development. Reviewing the literature, the study has reviewed the definition of digital citizenship, the role of teachers as digital citizens, the role of students as digital citizens, identity issues of digital citizenship, and the integration of digital citizenship and education as the main themes. This has been implicated to provide an authentic understanding of digital citizenship and educational development for teachers, students, educational experts, and educational institutions. It has also contributed to enrich the educational policies of higher education by highlighting the promises and limitations of digital citizenship on teaches and students' educational development.

### Acknowledgment

We wish to express our sincere gratitude to researchers, professors, and colleagues for their encouragement, supervision, and critics during writing this article.

## References

- Alazemi, A., F., Sa'di, I., T., & Al-Jamal, D., A. (2019). Effects of Digital Citizenship on EFL Students' Success in Writing. *International Journal of Learning, Teaching and Educational Research*, 18(4), 120-140. <https://doi.org/10.26803/ijlter.18.4.7>.
- Al-Zahrani, D. (2015). Toward Digital Citizenship: Examining Factors Affecting Participation and Involvement in the Internet Society among Higher Education Students. *International Education Studies*, 8(12), 203-217. <http://dx.doi.org/10.5539/ies.v8n12p203>.
- Fernández-Prados, J., S., Lozano-Díaz, A., & Ainz-Galende, A. (2021). Measuring Digital Citizenship: A Comparative Analysis. *Informatics*, 8(18). <https://doi.org/10.3390/informatics8010018>.
- Frau-Meigs, D., O'Neill, B., Soriani, A., & Tomé, V. (2019). Digital Citizenship Education: Overview and New Perspectives. *Council of Europe: Council of Europe Publishing F-67075 Strasbourg Cedex*. <https://www.researchgate.net/publication/337812656>.
- Gleason, B., & von Gillern, S. (2018). Digital Citizenship with Social Media: Participatory Practices of Teaching and Learning in Secondary Education. *Educational Technology & Society*, 21(1), 200-212. <https://www.jstor.org/stable/10.2307/26273880>.
- Harari, Y., N. (2019). *21 Lessons for the 21st Century*. London: Vintage. Print.
- Hava, K. (2018). The Impact of Digital Citizenship Instruction through Flipped Classroom Model on Various Variables. *Contemporary Educational Technology*, 9(4),390-404. <https://doi.org/10.30935/cet.471013>.
- Jones, L., M., & Mitchell, K., J. (2015). Defining and Measuring Youth Digital Citizenship. *New Media & Society*, 1-17. <https://doi:10.1177/1461444815577797>.
- Jones, L.M., Mitchell, K. J., & Walsh, W. A. (2014). *A Systematic Review of Effective Youth Prevention Education: Implications for Internet Safety Education*. Durham, NH: Crimes Against Children Research Center (CCRC), University of New Hampshire.
- Kelly, K. (2011). *What technology wants*. Penguin Books.
- Kim, M., & Choi, D. (2018). Development of Youth Digital Citizenship Scale and Implication for Educational Setting. *Educational Technology & Society*, 21(1), 155-171. <https://www.jstor.org/stable/10.2307/26273877>.
- Livingstone, S., & Brake, D. R. (2010). On the Rapid Rise of Social Networking Sites: New Findings and Policy Implications. *Children & Society*, 24(1), 75-83.
- Rahim, M. N. (2021). The Relationship Between the Time Spent on Facebook and GPA Scores of Post-Graduates. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(1), 94-102. <http://ijmaberjournal.org/index.php/ijmaber/article/view/74>.
- Rahim, M. N., & Chandran, S. C. (2021). Investigating EFL Students' Perceptions on E-learning Paradigm-Shift During Covid-19 Pandemic. *Elsya: Journal of English Language Studies*, 3(1), 56-66. <https://doi.org/10.31849/elsya.v3i1.59>.
- Ribble, M. (2017). *Digital Citizenship in Schools: Nine Elements All Students Should Know*. Washington, DC: International Society for Technology in Education.
- Richardson, J., & Milovidov, E. (2019). *Digital Citizenship Education Handbook*. Council of Europe.
- Searson, M., Hancock, M., Soheil, N., & Shepherd, G. (2015). Digital Citizenship within Global Contexts. *Educ Inf Technol*, 20(15), 729-741. <https://doi:10.1007/s10639-015-9426-0>.
- Simsek, E., & Simsek, A. (2013). New Literacies for Digital Citizenship. *Contemporary Educational Technology*, 4(2), 126-137.
- Surveillance Technology Determination Report*. Rep. 1st ed. Vol. 3Q. Seattle Information Technology, 2020. Print.
- Walters, M., G., Gee, D., & Mohammed, S. (2019). A Literature Review: Digital Citizenship and the Elementary Educator. *International Journal of Technology in Education*, 2(1), 1-21.
- Yuan, C., Wang, L., & Eagle, J. (2019). Empowering English Language Learners through Digital Literacies: Research, Complexities, and Implications. *Media and Communication*, 7(2), 128-136. <https://doi:10.17645/mac.v7i2.1912>.
- Zhong J., Zheng Y., Huang X., Mo D., Gong J., Li M., & Huang, J. (2021). Study of the Influencing Factors of Cyberbullying Among Chinese College Students Incorporated with Digital Citizenship: From the Perspective of Individual Students. *Front. Psychol*,12(621418),1-16. <http://doi:10.3389/fpsyg.2021.621418>