BEYOND SKILLS: RETHINKING DIGITAL CITIZENSHIP IN HIGHER EDUCATION

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Abstract: *This paper explores the importance of digital citizenship in higher education as a multidimensional concept that transcends technical competence. Digital citizenship is presented as a model that overlaps ethical awareness, social duty, and academic integrity to equip students to navigate the challenges of digital environments responsibly. The debate introduces the concerns of how issues such as academic dishonesty, privacy, disinformation, and pressures around identity shape students' online behaviors and whether they can engage critically with technology. Of specific interest is the intersection of digital citizenship and sustainability, and how good moral conduct online can contribute towards shared goals and prepare students to participate in global challenges. The debate makes a case for universities to design interventions, foster faculty engagement, and enact culturally responsive approaches that walk the line of digital skill opportunity and ethical practice. The conclusion of the article is that digital citizenship needs to become the key mission of higher education in order to prepare students to be effective, critical, and socially engaged citizens in a digital world.*

Keywords: *digital citizenship; digital ethics, higher education, sustainability.*

Defining Digital Citizenship: Dimensions and Debates

The concept of digital citizenship has become increasingly significant in educational research, particularly as universities and colleges adapt to the rapid digitalization of learning, communication, and civic life. While digital citizenship is often mentioned in policy and educational discourse, its definition is far from uniform. Scholars have debated its

scope, its relation to adjacent concepts such as digital literacy and digital rights, and its relevance for higher education students. By analysing the contributions of key studies, it is possible to map the contours of this concept and understand its role in contemporary higher education.

Choi (2016) also presents perhaps the most thorough conceptual examination by positioning digital citizenship as the extension of democratic citizenship in the age of the internet. Instead of viewing it as technical competence purely, Choi sees digital citizenship as an integration of ethical as well as civic as well as participatory aspects. It implies not only the use of technology efficiently but also the use of technology in the manner in which it reflects the values of democracy like respect, equity, as well as responsibility. Here the orientation toward democracy plays an extremely important role in the higher education sector where not only professional competencies but also universities serve as academies where students are prepared for active participation in society.

Jones and Mitchell (2016) also point up this dual nature of digital citizenship in their youth study. According to them, digital citizenship encompasses both the protective aspects of online safety and privacy as well as empowering aspects of civic involvement and agency in online domains. Their study implies that it is not possible to encapsulate digital citizenship as a checklist of competencies but, rather, it is an multidimensional construct influencing the way young people, including university students, negotiate the opportunities as well as the risks of online domains. It is reiterated in higher education contexts where the students bear not only the onus of learning the use of the digital tools for the purpose of academics but also the onus of maintaining integrity, critically examining the content available, as well as being an ethical member of online communities.

The distinction between digital citizenship, digital literacy, and digital rights is another central discussion. Following the argument by Pangrazio and Sefton-Green (2021), although the three interlink, they should not replace each other. Digital literacy encompasses the technical as well as cognitive skills required for access, appraisal, and production of online content. Digital rights bring the spotlight on the prerogatives as well as protections people hold within the virtual sphere, all the way from freedom of expression as well as privacy to access. Digital citizenship encompasses both literacy as well as rights but extends beyond them in situating the individual as a responsible member of the digital common. It assumes especial resonance for the higher education context where the learner is not just the recipient but also the producer of scholarship, where their online behavior may

attract long-term consequences on scholarship integrity, professional standing, as well as civic identity.

Efforts at measuring digital citizenship illuminate further the conceptual edges of the concept. Lozano-Díaz and Sebastián Hernández-Prado (2018) created an instrument for measuring digital citizenship and studied its psychometric properties. Their findings indicated the challenge of operationally defining digital citizenship due to the blend of technical, ethical, and civic aspects. Efforts at measuring it show similarly that digital citizenship itself is not an invariant trait but an evolving collection of behaviours and dispositions potentially varying by context. Fernández-Prados, Lozano-Díaz, and Ainz-Galende (2021) reiterated this point through carrying out a comparative study on the measurement of digital citizenship. It was their conclusion that although empirical instruments may be valuable, definitions as well as those of the indicators tend not to match study to study but complicate consensus-building. It betrays an ongoing difficulty: the notion widely accepted as valuable has contours in dispute.

In higher education specifically, Al-Abdullatif and Gameil (2020) explored students' knowledge and practice of digital citizenship. Their findings show a gap between awareness and application: while students often demonstrate knowledge of digital tools and norms, they may not consistently practice ethical or civic behaviours online. This suggests that digital citizenship in universities cannot be assumed to develop automatically with increased digital use. Instead, it requires intentional cultivation through curricula, institutional policies, and reflective learning opportunities. Similarly, Öztürk (2021), in a literature review, underscores that teaching digital citizenship in higher education often remains fragmented and underdeveloped. The review points to the need for systematic approaches that integrate digital citizenship into broader educational goals, rather than treating it as an optional or peripheral skill.

Another relevant discussion comes from Slipenko et al. (2025), who examine the development of digital literacy in university settings. While their main area of interest lies in literacy, their discussion greatly resonates where digital citizenship is concerned. According to them, the basis upon which digital citizenship grows lies in the development of digital literacy so that students might critically access, evaluate, and produce online content without being able to make ethical decisions or civic actions. Their discussion supports the notion of not compartmentalizing the concept of digital citizenship as something unrelated to the development of digital literacy but considering it an

extension where the latter lies at the centre but rights, responsibilities, and social participation as well as other aspects might also feature.

Bal and Akçil (2024) contribute an additional dimension by connecting sustainability in higher education with digital citizenship. Their work outlines the rollout of a sustainable online course intended for building the capacity for digital citizenship. They point out that digital citizenship not only has to be conceptualized as an individual capacity but as an institutional and collective responsibility as well. According to them, universities must incorporate digital citizenship in the context of teaching practices in order for it to foster lifelong learning, ethical understanding, as well as social responsibility. That resonates with larger discourses on sustainability in learning where the argument follows that digital citizenship helps in the preparation of learners for active participation in an increasingly changing as well as globalizing world.

Taken as a whole, the studies suggest college-level digital citizenship as a multifaceted construct made up of literacy, ethics, rights, and civic engagement. It thus extends beyond attainment of technical skill to cultivation of dispositions toward critical thought, deference toward difference, and care for the content of one's own electronic record. In doing so, the studies call attention to challenges: definitional ambiguity, difficulty in measurement, and the gap between knowledge and practice. Each of the challenges in turn makes the case for the necessity of the leadership of higher education institutions in defining, teaching about, measuring digital citizenship as an institutional objective for the development of professionals who will also be engaged digital citizens.

Ethical, Social, and Academic Challenges of Digital Citizenship

Perhaps the most discussed sector of digital citizenship among university students relates to the use of technology on an ethical basis. Hamiti, Reka, and Baloghová (2014) maintain the perception that higher learning institutions have a dire need for embedding ethical knowledge among learners at the point of using information technologies. In their research work, they highlight the reality that learners lack clear knowledge pertaining to how ethical principles—fairness, honesty, and respect—translate online. Instances of plagiarism, illicit sharing of materials, as well as misapplication of the information system mirror the difficulty of upholding the traditional ethical norms in the rapidly shifting online environment.

Recent research has widened the discussion beyond individual behavior to larger systemic issues. Marín and Tur (2024), in a scoping review, identify an extensive set of ethical dilemmas linked to the use

of technology in learning contexts. They range from issues of surveillance, permission, data gathering, and the dichotomy between innovation and confidentiality. The writers insist on the point that ethical dilemmas go beyond individual decisions but are ingrained in institutional procedures, for example, the way universities structure online learning platforms or deal with student data. Their report recommends that digital ethics in higher education should be approached holistically where all the stakeholders--students, teachers, and the institution--share the onus.

Zvereva (2023) elaborates on this argument further by discussing how higher education's digital ethics call for an updating of moral principles. She herself underlines the point that the realm of cyberspace isn't an objective field but an area informed by cultural values, power dynamics, as well as communication protocols. Effective digital citizenship therefore also implies universities seeking students' internalisation not just of technical principles but ethical principles tailored for online interactions as well as communication. It involves going beyond facile "dos and don'ts" toward cultivating ethical thinking as well as digital empathy.

Social Challenges and Digital Responsibility

In addition to ethics, digital citizenship also involves social responsibilities as well as challenges for students of higher education. Mothafar et al. (2024) deal with the notion of digital social responsibility, especially in the context of international higher educational institutions. Their research illustrates the way the university's digital culture may define the way students conceive and apply responsibility online. For instance, universities inspiring openness, inclusivity, as well as civic engagement online lead students not only to recognize themselves as individual learners but as part of an overarching online community. In this vein, digital social responsibility mediates the way students define their responsibilities in educational life as well as society at large, shape behaviors as informative sharing, civic engagement, as well as cultural respect.

Li (2024) also emphasizes the necessity of connecting social responsibility with digital ethics. Comparing first- and fifth- year students, she reveals that data security knowledge as well as ethical consciousness grows along with the progression of study but not consistently. It follows then that social responsibility in the context of the internet doesn't naturally develop but must be the outcome of organized educational interventions. Her report discloses universities themselves bear some measure of social responsibility: making sure students graduate both academically knowledgeable but also

responsible in their ethical participation in the internet as well as being aware of the risk of data breach or false news.

Fonseca et al. (2019) offer additional evidence for how universities may foster social responsibility in students through designed programs. Their study demonstrates the ways in which online platforms may bring about collaboration, social conscience, and responsibility, making students effective citizens both online and offline. What's more, their findings indicate that digital citizenship may best be comprehended as an aggregated phenomenon whereby the university populace sets norms of trustworthiness, respect, and mutual responsibility.

Academic Challenges in the Digital Era

The academic dimension of digital citizenship presents another set of challenges, particularly regarding risks, responsibilities, and online safety. Berei and Pusztai (2022) explore how the widespread use of digital devices creates both opportunities for learning and significant academic risks. Their findings show that while digital tools increase access to knowledge, they can also encourage distraction, superficial learning, and academic misconduct if not accompanied by proper guidance. Digital citizenship, from this perspective, involves helping students develop strategies to balance the benefits of digital tools with the discipline required for deep learning and responsible behavior.

Perhaps the greatest issue of all could be academic integrity. Boehmer et al. (2015) consider predictors of online safety behavior for college students, citing risk perception, institutional support, and social influence. Their findings indicate how riskiness of online behavior gets underestimated by the students themselves, for example sharing passwords or employing non-secure media, which could compromise both individual data as well as academically created content. Effective intervention therefore not only involves technical training but also behaviorally driven strategies for the development of safe and responsible practice.

Barnard-Wills (2012) takes this debate into the field of e-safety education, noting how students become ever-more surveilled in online contexts both by institutional measures and larger social mechanisms. According to him, this presents something of a paradox: students must at the same time act responsibly as digital citizens but also operate within regimes of control and monitoring. For universities, this presents the problem of how best to educate for digital responsibility without merely instilling compliance. Rather, Barnard-Wills says digital civic education should help students learn to critically question

regimes of monitoring and assert their digital rights as well as responsibilities.

Finally, Zvereva (2023) points out that academic challenges are not purely technical or institutional but also cultural. The digitalization of higher education requires students to adapt their communication styles, norms of collaboration, and even moral reasoning to online environments. Failures to do so can result in misunderstandings, exclusion, or breaches of academic integrity. Thus, universities must play an active role in modernizing moral and academic norms to fit the demands of digital education.

Future Directions in Digital Citizenship Research and Practice

Although past scholarship has made transparent numerous of the ethical, social, and learning issues, future research must consider building sustainable, adaptable, and vision-forward methods for equipping learners for deeper forays into ever-more complex online environments. Several potential areas for development emerge from the literature, ranging from the integration of digital citizenship into curricula to transforming the potential of artificial intelligence (AI) and sustainability in learning.

One urgent future area is the meeting point between academic integrity and artificial intelligence. According to Mahmud (2024), the development of AI technologies like large language models and automated programs poses some foundational questions about how educational integrity might continue. Conventional definitions of plagiarism, authorship, and originality are being turned on their heads so universities need to rethink the way assessments occur and create new guidelines for the use of AI responsibly. What emerges as an urgent necessity is the integration of digital citizenship not just about technical competencies but also about critical ethical thinking about the technologies on the horizon. Future scholarship will need to investigate how students might continue to become competent in using AI programs ethically, innovating but not losing sight of integrity.

Another important area lies in the area of training and organized interventions. Almudara et al. (2024) show how training programs for digital citizenship may help students' attitudes toward sustainable development in positive ways. Their results highlight the promise of education for connecting the teaching of digital citizenship with larger social ends, especially the United Nations' Sustainable Development Goals (SDGs). In the same vein, Bal and Akçil (2024) offer evidence for well-curated online courses being able to continue the building of digital citizenship competencies, where the online media themselves may be used for the instruction of responsibility, ethics, and

participation. Those investigations suggest the future of educational content for digital citizenship lies in deliberated programmatic interventions where technical and ethical learning gets integrated toward long-term social ends.

Another ripe area for future scholarship lies in the connection between sustainability and digital citizenship. According to Lozano-Díaz and Fernández-Prados (2020), the education of digital citizens must run in tandem with critical and activist takes on sustainable development. In this way, educators not only instill students with online responsibility but also empower them to use online platforms for activism, civic engagement, and environmental responsibility. Gooding and Phillips (2025) broaden the concept further by introducing the notion of ecological citizenship online. Their scholarship posits future scholarship on digital citizenship as necessarily focusing on how online practice might feed into ecological awareness and responsibility, combining environmental sustainability with online ethics. In doing so, these lines of thought suggest an enriched conception of digital citizenship linking individual responsibility with global challenges.

Cultural as well as contextual variations also constitute an important consideration for future directions. In their introductory study on Malaysian undergrads, Mahadir, Baharudin, and Ibrahim (2021) point out differences in digital citizenship skills in different cultural contexts. Their study reveals that digital citizenship could not be presumed as developing homogeneously among student groups; however, it should be studied in the context of local values, institutional behavior, as well as social expectations. It follows then that future scholarship should employ cross-cultural as well as comparative methodologies so as to keep the digital citizenship frameworks context-sensitive but identify universal competencies.

Teacher perceptions also call for additional consideration. Von Gillern et al. (2024) present the Teachers' Perceptions on Digital Citizenship Scale as a measure of understanding how teachers think about their responsibility for promoting digital citizenship. Their research emphasizes the value of faculty development because teachers' orientations, behaviors, and modeling of digital actions make an especially large difference in student outcomes. That implication recommends the next phase of scholarship as attending not only to students but also to how teachers might be prepared to bring digital citizenship into their classrooms so as to consolidate its effect.

Taken together, these studies suggest that the future of digital citizenship in higher education must be multidimensional and interdisciplinary. It requires integrating academic integrity in the age of AI, designing structured and sustainable interventions, embedding

connections to sustainability and ecological responsibility, acknowledging cultural differences, and strengthening faculty involvement. Research should also prioritize longitudinal and outcome-based evaluations to assess whether digital citizenship programs have long-term effects on students' ethical awareness, civic engagement, and employability.

Conclusions

University digital citizenship is the transforming catalyst for the manner universities prepare students for life and work in the era of the digital society. Rather than being restricted to the learning of skills, it offers the opportunity for reshaping the mission of higher education in the development of human beings who will bring together the potential for technical dexterity with the ability for ethical reasoning, social awareness, and civic engagement.

The evidence canvassed in this paper lends support for the proposition that universities can be laboratories for the cultivation of novel types of citizenship for the contemporary digital age. Through the development of learning contexts where discussion, critique, and informed engagement are enabled, higher education institutions may help their students comply not only with the imperatives of the academy but also comply with the broader responsibilities that come with being an active participant in digital communities. Coming into being here is the promise for the reconceptualisation of higher education as an institution for the production of cultural change capable of linking local circumstances and global challenges.

The other important insight is the flexibility of digital citizenship. Its applicability spans disciplines, cultures, as well as educational designs, providing the potential for embedding it in the widest range of curricula and teaching approaches. In doing so, it presents itself as a strategic asset for higher education systems trying to maintain responsiveness to burgeoning technologies, transforming labour market imperatives, as well as changing social requirements.

Finally, digital citizenship emphasizes the necessity of grounding technology development in human values. By promoting programs focusing on responsibility, inclusivity, and sustainability, universities may help prevent digital transformation at the expense of ethics or equity. The future of higher education thus hinges not just on the production of well-qualified graduates but on the development of digitally responsible citizens who may lead by their integrity, creativity, as well as an understanding of how the internet may lead toward the internet for all.

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