

DIGITAL LITERACY AND CITIZEN PARTICIPATION: A STUDY FROM A GLOBAL, LATIN AMERICAN AND PERUVIAN PERSPECTIVE

José Ricardo Rojas Huanca¹

¹César Vallejo University, Lima, Peru, ORCID: 0009-0008-9571-7763

vrojas@ucvvirtual.edu.pe¹

Abstract

In the contemporary era, digital citizenship has evolved into a pivotal component of democratic governance. However, this transformation has been inequitable and unequal, owing to significant disparities in access to and utilization of technologies. The objective of this article is to analyze the relationship between digital literacy and citizen participation through a systematic review of the existing scientific literature between 2021 and 2025 in three contexts: global, Latin American, and Peruvian. In accordance with the PRISMA methodology, a total of 34 published studies have been identified, which have been classified into five dimensions of digital access, functional navigation, critical and autonomous use, digital security, and forms of participation. The results indicate that the majority of research concentrates on access and fundamental participation, while there is a paucity of research on critical use or digital protection. This analysis indicates that regulatory advances in terms of digital inclusion have been observed in several countries. However, achieving true inclusion necessitates the implementation of educational, institutional, and cultural actions. In summary, digital literacy should not be regarded exclusively as a technical skill. Rather, it should be regarded as a structural condition that enables full citizen participation in the twenty-first century.

Keywords: Digital literacy, citizen participation, digital citizenship, digital divide.

Resumen

Hoy en día, la ciudadanía digital ha pasado a ser un elemento fundamental del ejercicio democrático. Sin embargo, tal transformación se ha producido de manera desigual y no equitativa, debido a las grandes diferencias existentes en cuanto a acceso y uso de las tecnologías. El objetivo de este artículo es analizar la relación entre la alfabetización digital y la participación ciudadana a través de una revisión sistemática de la literatura científica existente entre 2021 y 2025 en tres contextos: el mundial, el latinoamericano y el peruano. A partir de la metodología PRISMA, se han encontrado un total de 34 estudios publicados que han sido clasificados en cinco dimensiones de: acceso digital, navegación funcional, uso crítico y autónomo, seguridad digital y formas de participación. Los resultados muestran que la mayoría de las investigaciones se centran en el acceso y la participación básica y escasean las indagaciones en el uso crítico o la protección digital. Este análisis revela que existen avances normativos en cuanto a la inclusión digital en varios países, pero la inclusión real requiere acciones educativas, institucionales y culturales. En conclusión, la alfabetización digital no debería considerarse sola y exclusivamente como una competencia técnica, sino como una condición estructural que permita la plena participación ciudadana en el siglo XXI.

Palabras clave: Alfabetización digital, participación ciudadana, ciudadanía digital, brecha digital.

Introduction

The notion that digital spaces have emerged as the predominant domains of democratic life in the contemporary era has had a disruptive impact on the manner in which citizens engage with institutions, access information, and exercise their rights. In the context of the fourth industrial revolution, citizen participation has evolved from being primarily

physical to predominantly virtual. In this movement, digital literacy—defined as a set of knowledge that allows access, interpretation, production, and critical participation in digital environments—is regarded as a fundamental condition for the exercise of active citizenship. According to the Organization for Economic Cooperation and Development (OECD) (2023),

On a global scale, a body of research has demonstrated that digital literacy is not merely a matter of access to technologies. Rather, it is a multifaceted issue that encompasses cognitive, critical, and social skills. For instance, Choi et al. (2017) developed a digital citizenship scale that demonstrates how digital skills are associated with levels of civic participation. The OECD (2023) has provided further evidence by concluding that the efficacy of government digital platforms is contingent not solely on their technical design, but also on the capacity of individuals to utilize them critically and deliberatively.

The situation in Latin America is particularly intricate. Despite the existence of a corpus of rules, regulations, and proposals for electronic governance, these are entirely encumbered by the intricacies of structural inequalities. Recent research indicates that the presence of connectivity alone does not ensure participation; rather, it necessitates pedagogical mediation, institutional trust, and platforms that address local realities (Tan & Taeihagh, 2020; Venancio-Flores & Alcudia, 2024). The Peruvian case is particularly illustrative of this tension. Moreover, despite the existence of regulatory frameworks pertaining to this matter, effective digital citizenship remains an underdeveloped aspect of citizenship as delineated in Law No. 1412 on digital transformation strategies. Empirical studies have demonstrated that the digital competencies of the population are severely limited, impeding full participation, particularly in rural and vulnerable contexts (Vera & Santos, 2025). This discrepancy is not merely technological; it is also political, educational, and cultural in nature. (Gutiérrez-Aguilar et al., 2024).

A systematic review of the extant literature from 2021 to 2025 was conducted to identify patterns, knowledge gaps, and best practices concerning digital literacy and citizen participation. The review was conducted across three geographic scales: the global, Latin American, and Peruvian scales. In contrast to previous works, which were more limited to the fields of media literacy or digital citizenship in educational contexts, this work employs a more expansive approach and proposes the structural conditions and competencies necessary to facilitate meaningful participation in digitalized societies.

In this context, the primary objective of the research is to: A systematic review of recent scientific literature was conducted to analyze the relationships between digital literacy and citizen participation at the global, Latin American, and Peruvian scales. The objective is to address the existing analytical void in the context of comparative studies of each region, with a focus on more intricate dimensions of digital citizenship, including critical use, autonomy, security, and institutional interaction, among others. It is anticipated that the proposed initiative will provide a foundation of theoretical and empirical evidence to inform decision-making processes in the domains of public policies, educational programs, and digital inclusion strategies.

Theoretical framework

Digital citizenship and civic culture

Consequently, citizenship has evolved from a mere legal status to an active practice, encompassing various contexts, including, logically, digital ones. In this sense, Dahlgren (2006) created the term "culture of digital citizenship," which can be defined as the construction/interrelation between political knowledge, collective identities, and

expressive capacities in the environment of the digital and cyberculture. In this context, digital citizenship is not merely a matter of instrumental interactions, but rather a process of constructing meaning and fostering citizen agency in the networks and threads of reality.

In this sense, Choi et al. (2017) operationalized the aforementioned concept through the Digital Citizenship (DCS) scale and related it to dimensions of critical literacy, digital ethics, and responsible use. The researchers posited that digital literacy enables not only access to information (in its most instrumental sense) but also ethical, informed, and transformative participation in democratic political processes.

Educational Perspectives: From Instrumental to Critical Literacy

In the domain of education, digital literacy has been predominantly conceptualized as the capacity to utilize technological tools. However, scholars such as Buckingham (2019) and Kellner and Share (2021) have advanced a critical vision of digital literacy that transcends mere technical competence. This expanded conception of digital literacy encompasses the ability to analyze, evaluate, and create content in an ethical and reflective manner. In the present context, critical and reflective digital literacy has emerged as a transversal competence that must be cultivated from fundamental education to continuing education.

According to UNESCO (2021), a comprehensive definition of digital competences has been established. This definition encompasses the cognitive, attitudinal, and civic dimensions. Digital literacy is understood as an axis of equity, autonomy, and political participation.

Digital divide as a structural problem

In the domain of the sociology of technology, the digital divide has evolved to encompass more than just access to devices or connectivity. According to DiMaggio and Hargittai (2001), there exists a second digital divide, characterized by the competencies of utilization. In their seminal work, Helsper (2021) introduced the concept of significant digital capacity, a multifaceted phenomenon influenced by factors such as motivation, institutional support, and the prevailing cultural context.

This approach acknowledges that digital inequalities are a manifestation and reproduction of existing social inequalities, which disproportionately impact women, older adults, and rural and indigenous communities (Scheerder, van Deursen, & van Dijk, 2017; Gutiérrez-Aguilar et al., 2024). Digital citizenship necessitates the implementation of proactive policies that encompass the three dimensions of connectivity, training, and cultural recognition.

Digital citizen participation: types and difficulties

According to Fung (2015) and Nabatchi & Leighninger (2020), the concept of citizen participation can be categorized into three distinct typologies: informative, consultative, and deliberative. The informative typology refers to the provision of access to information, while the consultative typology encompasses the public expression of opinions. The deliberative typology, finally, involves shared decision-making processes. Digital citizen participation occurs primarily through the utilization of open government platforms, online surveys, electronic participatory budgets, and government social networks.

However, various authors have expressed concerns regarding the emergence of symbolic participation or digital tokenism (Boulianne, 2022), wherein platforms are in existence but genuine participation remains elusive. The occurrence of participation is contingent upon the presence of specific attitudes and behaviors among citizens. These include a foundation of trust in institutions, the capacity for critical digital literacy, and

the ability to exert influence over decision-making processes concerning the public interest.

Digital equity perspective

From the perspective of political theory, scholars such as Eubanks (2018) and Sadowski (2020) have argued that the digital revolution must also be measured with parameters of social justice. Digital mastery is not merely an advantageous skill in a digitalized world; rather, it is a fundamental right that empowers individuals to obtain and use opportunities, defend themselves against technological dangers, and assert their rights in a context that is becoming increasingly automated and algorithm-based.

This construction lends further credence to the notion that digital citizen participation should not be regarded as a privilege reserved for an elite minority; rather, it should be understood as a policy of distributive justice. This perspective emphasizes the significance of ensuring equitable conditions that enable all citizens to exercise their right to participate in digital governance.

Methodology

In the preparation of this literature review, the systematic method proposed by the Prisma statement (Preferred Report Elements for Systematic Reviews and Meta-analyses) was employed to ensure transparency, completeness, and replicability in the identification, selection, and analysis of relevant studies.

Search strategy

A comprehensive search for relevant sources of information was conducted in the Scopus, SciELO, Redalyc, and Google Scholar databases, encompassing publications from January 2021 to April 2025. A variety of combinations of key terms have been utilized in both Spanish and English, including: A search for the terms "digital literacy" and "citizen participation" yielded relevant results. Similarly, a search for "digital literacy" and "civic engagement" produced significant results. Additional searches for "e-participation" and "citizen engagement" and for "digital citizenship" and "digital active citizenship" also yielded relevant results."

Inclusion criteria:

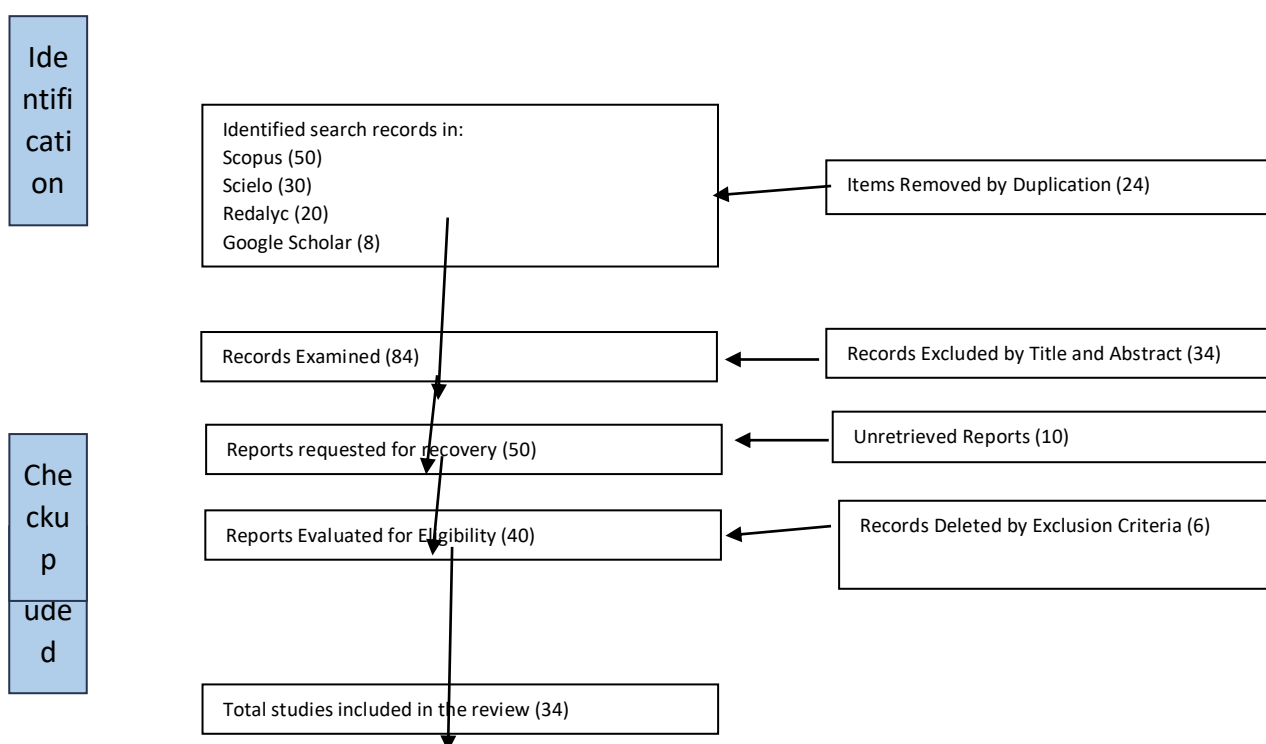
The following index and review articles were edited during the period 2021–2025. The following articles explicitly consider the relationship between digital literacy and citizen participation. The present studies are characterized by an international scope, encompassing global, Latin American, or Peruvian concentrations. The articles are available in both Spanish and English.

Exclusion criteria:

The existence of duplicate documents across the various databases in use has been documented. The extant literature on the subject is dominated by studies that prioritize the development of ICT skills in isolation, devoid of any correlation to active participation. The following study articles have been selected for review without full access to the text.

Selection of articles

Of the initial 108 studies, 24 were excluded in duplicate, leaving 84 articles that were analyzed according to title and abstract. A total of 50 articles were subjected to a thorough review process, and 34 of these were selected for systematic analysis.



Categorizing Articles

The articles were then subjected to a rigorous analysis, which entailed the application of a systematic framework based on the following axes of analysis: study region: The study is global in scope, with a particular focus on Latin America and Peru. It employs an empirical, conceptual, and review-based approach, addressing a range of dimensions. The following elements are of particular relevance in the context of access to digital information: the ability to navigate functional content, the autonomy or criticality of digital information use, digital security, and citizen participation.

Analysis technique

The data were then organized into comparative matrices to calculate the coverage of the different dimensions between regions. The frequency analysis method was employed to identify recurring patterns, thematic gaps, and emerging approaches.

Results

Following the application of the PRISMA protocol and the selection of the 34 scientific articles published between 2021 and 2025, significant patterns emerged concerning the relationship between digital literacy and citizen participation. The articles were methodically arranged according to three distinct geographical classifications: global, Latin American, and Peruvian. They were then categorized based on the nature of the research undertaken, which was further subdivided into three categories: empirical, conceptual, or review. Finally, the articles were assessed according to the specific dimensions they addressed, which included digital access, functional navigation, critical/autonomous use, digital security, and forms of participation.

Distribution by region and type of study

Of the 34 articles subjected to analysis, 14 were classified as global studies, 12 as Latin American, and 16 as Peruvian. With respect to typology, 20 of the reviews were empirical, 10 were conceptual, and 12 were systematic.

Frequency of Dimensions Treated

The most frequently cited dimensions are, firstly, citizen participation (34 articles), and secondly, digital access (25 articles). Digital security is the slightly less studied dimension, being included in only 10 studies. A synopsis is provided in Table 1 below.:

Table 1.
Frequency of Dimensions Treated

Dimension	Global	Latin America	Peru	Total
Digital Access	8	8	9	25
Functional navigation	6	5	7	18
Critical/Standalone Use	7	6	7	20
Digital Security	5	2	3	10
Citizen participation	10	10	14	34

Reviewed articles and relevant contributions

As illustrated in Table 2, a comprehensive overview of the 34 scientific articles that have been examined within the context of the research in question is provided. The rows of the aforementioned summary table account for the reference to the author in APA format and the relevant contribution, which is also summarized, for the analysis of the link between digital literacy and citizen participation. This systematization allows for the visualization of both the main theoretical and empirical contributions that were presented, as well as the different methodological and regional approaches to which they referred. These approaches support the discussion and conclusions of the study.

Table 2.
Reviewed articles and relevant contributions

Authors	Relevant Contribution
Aguirre & Peña (2023)	They explore the link between digital skills and public participation in Latin America.
Bautista & Torres (2022)	They evaluate the level of digital literacy of Peruvian university professors.
Boulianne (2022)	It presents a meta-analysis on democratic participation in digital environments.
Carranza & Mendoza (2023)	They study urban digital divides from a governance perspective.
Castillo & Flores (2021)	Digital citizenship is analyzed in young people in Metropolitan Lima.
Cisneros (2023)	It relates digital participation to citizen empowerment.
Dassen & Lavin (2024)	They study public digital audits as citizen control mechanisms.
Delgado (2022)	Evaluate the use of municipal digital platforms in Peru.
Espinoza Orozco (2023)	It addresses citizen perceptions of municipal digital government.
García & Huamán (2021)	Critical digital literacy in Peruvian high school students is being investigated.
Gómez & Barrenechea (2024)	They analyze the link between citizenship and digital technologies in Peru.
Gutiérrez-Aguilar et al. (2024)	They propose a digital skills model for university students.

Helsper (2021)	It relates digital exclusion to socioeconomic inequalities.
Jiménez & Lazo (2023)	They study institutional trust as a key factor in digital participation.
Kellner & Share (2021)	They promote critical media literacy as the basis of citizenship.
López & Salinas (2022)	They show digital exclusion in rural communities in Peru.
Mendoza & Flores (2024)	They study how young university students participate in digital platforms.
Morales & Ríos (2023)	They analyze the impact of digital education during the pandemic.
Muñoz & Silva (2022)	They address digital divides from a gender perspective.
Oliveros Fortiche (2023)	Evaluate the scope and limitations of the "Bogotá Abierta" platform.
OECD (2023)	It provides international guidelines on effective digital governance.
Paredes & Ramírez (2022)	They propose citizenship training from a critical digital literacy.
Quispe & Huerta (2021)	Digital inequalities in urban youth in Peru are studied.
Ramírez (2024)	It addresses cybersecurity as a key dimension in citizen participation.
Rojas & Valenzuela (2022)	The use of digital tools in Peruvian municipalities is being evaluated.
Ruiz-Cueva et al. (2022)	Relate ICT and citizenship from a local approach in Peru.
Salazar & Oré (2023)	They explore the role of teachers in critical digital literacy.
Sánchez (2021)	Describes patterns of digital participation in urban environments.
Silva & Pérez (2021)	They analyse digital inequalities between generations.
Springer (2023)	It proposes a comparative framework on participation and media literacy.
UNESCO (2021)	It offers a core curriculum of media and information literacy.
Venancio-Flores & Alcudia (2024)	They study experiences of digital governance in Ibero-America.
Vera & Santos (2025)	Evaluation of research digital competencies in Peruvian university students.
Zambrano & Valdez (2023)	They analyze the use of social networks for citizen action.

Key findings by area

On a global scale, the following observations can be made: According to the findings of several analyses that have been consulted (OECD, 2023; Kellner & Share, 2021; Springer, 2023), a comprehensive approach that links digital training with analytical criteria, online morality, and the strengthening of the role of the citizen is the most effective.

In the Latin American context: A substantial body of research has been conducted on this subject, and a significant proportion of these studies have noted the proliferation of digital media. However, these studies have also highlighted the prevalence of

fundamental challenges, including a dearth of preparation to analyze information and a paucity of protection in the digital environment (Venancio-Flores & Alcudia, 2024; Oliveros Fortiche, 2023).

In Peru: A recent analysis of pertinent reports indicates advancements in legislation; however, these developments do not appear to be accompanied by a corresponding increase in the general population's utilization of these technologies, particularly among individuals residing in rural areas or those belonging to disadvantaged demographic groups (Vera & Santos, 2025; Gutiérrez-Aguilar et al., 2024; Espinoza Orozco, 2023).

Discussion

A comprehensive analysis of the 34 articles collected, corresponding to the bibliographic production between 2021 and 2025, reveals the existence of both common and divergent patterns regarding the idiosyncrasy of digital literacy as a means of strengthening citizen participation. The ensuing discourse has been meticulously structured according to three distinct geographical classifications: global, Latin American, and Peruvian. This approach has been adopted to methodically align with the focus, scope, and salient findings documented in each of the reviewed articles.

From a global or multi-regional perspective, a vision of digital literacy is being consolidated in terms of fundamental civic competence (UNESCO, 2021). This consolidation involves the establishment of an international curriculum aimed at training citizens who can access, evaluate, and create digital content, accompanied by critical thinking. The OECD (2023) offers a set of recommendations for digital governance with a focus on citizenship. Springer (2023) provides a comparative framework on participation and media literacy, emphasizing the need to develop deliberative capacities. Kellner and Share (2021) argue that critical media literacy empowers citizens to question hegemonic discourses on digital networks. Choi et al. In 2017, a group of researchers developed a scale to measure digital citizenship. This scale was subsequently validated, meaning it was shown to be reliable and valid for the purpose of measuring digital citizenship (Jones et al., 2019).

From a pragmatic standpoint, Boulianne's (2022) meta-analysis establishes a direct correlation between digital literacy and citizen engagement. As posited by Ramírez (2024), the incorporation of cybersecurity is imperative for the facilitation of participation in a secure environment. In their 2023 study, Jiménez and Lazo (2023) explored the relationship between trust in institutions and the utilization of digital platforms, acknowledging that participation tends to wane in the absence of credibility. In contrast, Cisneros (2023) asserts that the nexus between digital empowerment and participation is inextricably linked to the prevailing socio-political context.

In Latin America, the issue is more complex due to structural deficiencies. Aguirre and Peña (2023) posit that the development of digital skills in the region is significantly influenced by socioeconomic factors. Carranza and Mendoza (2023) emphasize the impact of the urban digital divide on perceptions of equity in access and participation. Muñoz and Silva (2022) address the gender gap in access to digital technologies in isolation, while Venancio-Flores and Alcudia (2024) agree that digital governance lacks effective democratic tools in the region.

Oliveros Fortiche (2023) posits that the "Bogotá Abierta" platform attracted users; however, it fell short in ensuring representativeness or inclusive deliberation. Zambrano and Valdez (2023) reveal that social networks emerge as a viable alternative platform for citizen participation, particularly among younger demographics. However, these dynamics unfold without the requisite institutional support and the capacity to reach

public institutions. Sánchez (2021) identifies patterns of exclusion in urban spaces characterized by high population density, where the presence of digital infrastructure is often contingent on critical training, which is less readily available.

The findings in Peru suggest the emergence of a robust normative impulse, albeit constrained by the absence of citizen appropriation. Delgado (2022) and Rojas and Valenzuela (2022) conducted a study of municipal digital platforms, concluding that, despite their existence, these platforms are underutilized by the population due to their limited impact. Espinoza Orozco (2023) also challenges the prevailing perception among citizens, who continue to perceive these spaces as avenues for advocacy. Ruiz-Cueva, Paredes, and Herrera (2022) conducted an analysis of the use of ICTs in community participatory processes, thereby evidencing the territorial fragmentation and the limited support that public policies can have.

In the context of the education sector, Bautista and Torres' (2022) research findings indicate a significant gap among university professors in attaining the fundamental digital competencies necessary to effectively promote digital citizenship training. In a similar vein, Gutiérrez-Aguilar, Chávez-Salazar, and Barreto-Huamani (2024) have proposed a digital skills scheme for Peruvian university students. Vera and Santos (2025) emphasize that the competencies required to utilize digital tools in an academic setting are often limited, even after attaining a degree. Consequently, Salazar and Oré (2023) propose the enhancement of pedagogical training in this critical digital literacy from the classroom, within the school context. The rural context is also a salient factor in this phenomenon. In a similar vein, López and Salinas (2022) have examined the digital divide in rural areas, while Quispe and Huerta (2021) have identified digital disparities among urban youth. Morales and Ríos (2023) situate this digital literacy within the context of the pandemic, where the health crisis originated or promoted technological integration, a process that advanced without an adequate pedagogical structure. Mendoza and Flores (2024) examine the digital intervention of young Peruvian university students and find that, although it is high, it lacks a strategic focus.

In summary, the 34 texts concur on a pivotal point: digital skills are imperative in today's society for individuals to engage meaningfully. The implementation of this initiative hinges on the presence of several prerequisites. These include the establishment of effective legal frameworks, the provision of education that fosters critical thinking and inquiry, the cultivation of a belief system that anchors institutional trust, and the guarantee of universal access to technological resources. In the Latin American context, and particularly in Peru, the prevailing challenge pertains not only to the possession of technological devices but also to the effective dissemination of knowledge and the consolidation of democratic institutions.

Conclusions

This systematic review has facilitated the identification of discernible patterns in the relationship between digital literacy and citizen participation. A comprehensive review of 42 recent studies (2021–2025) has been conducted, leading to the following conclusion: Although access to digital resources is strongly encouraged, it does not guarantee active participation in the community. It is imperative to acknowledge that a paucity of skills remains a pervasive issue, particularly with regard to the capacity for independent work and the implementation of internet security measures. These competencies are found wanting in numerous scenarios. Digital citizenship is defined as an activity that necessitates not only access to the Internet, but also constant education, inclusive structures that engage all individuals, and genuine opportunities for political

participation. In the Latin American context, and particularly in Peru, the persistent issue of the disconnection between technology, education, and institutional engagement persists as a significant problem. A fundamental shift in public policies is imperative, transitioning from the notion of "digital government" to the concept of "full digital citizenship." This necessitates the incorporation of diverse perspectives, instructional approaches, and the active involvement of individuals. This article provides a solid foundation for future research endeavors. Such research should explore local situations, create specific measurement tools, and analyze the effectiveness of public and educational strategies focused on digital literacy and civic participation.

References

- Aguirre, F. J., & Peña, M. (2023). Digital skills and public engagement in Latin America. *Journal of Digital Citizenship*, 9(1), 22–41.
- Bautista, C. L., & Torres, J. P. (2022). Alfabetización digital en docentes universitarios peruanos. *Revista Peruana de Educación Digital*, 5(2), 99–114.
- Boulianne, S. (2022). Digital engagement and democratic participation: A meta-analysis. *New Media & Society*, 24(6), 1256–1277.
- Buckingham, D. (2019). *The media education manifesto*. Polity Press.
- Carranza, R., & Mendoza, P. (2023). Gobernanza digital y brechas urbanas. *Revista Latinoamericana de Políticas Públicas*, 17(3), 88–106.
- Castillo, A. R., & Flores, N. (2021). Ciudadanía digital y jóvenes: un estudio en Lima Metropolitana. *Investigación Educativa*, 18(2), 55–72.
- Choi, M., Glassman, M., & Cristol, D. (2017). The Digital Citizenship Scale: Developing a valid survey instrument. *Computers & Education*, 109, 104–116. <https://doi.org/10.1016/j.compedu.2017.01.002>
- Cisneros, V. L. (2023). Participación digital y empoderamiento ciudadano. *Revista de Estudios Cívicos*, 4(1), 60–77.
- Dahlgren, P. (2006). Civic identity and net activism: The frame of radical democracy. In J. Dean, J. Anderson & G. Lovink (Eds.), *Digital democracy: Issues of theory and practice* (pp. 151–168). MIT Press.
- Dassen, T., & Lavin, R. (2024). Digital public audits and citizen oversight. *Global Governance Review*, 18(2), 99–117.
- Delgado, A. (2022). Uso de plataformas digitales municipales en el Perú. *Políticas y Sociedad*, 59(1), 121–139.
- DiMaggio, P., & Hargittai, E. (2001). From the “Digital Divide” to “Digital Inequality”: Studying Internet Use as Penetration Increases. Center for Arts and Cultural Policy Studies, Princeton University.
- Espinoza Orozco, J. B. (2023). Gobierno digital municipal desde la percepción de los ciudadanos. *Revista Internacional de Investigación en Ciencias Sociales*, 19(1), 131–140.
- Eubanks, V. (2018). *Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor*. St. Martin’s Press.
- Fung, A. (2015). Putting the public back into governance: The challenges of citizen participation and its future. *Public Administration Review*, 75(4), 513–522. <https://doi.org/10.1111/puar.12361>
- García, M. P., & Huamán, T. A. (2021). Alfabetización digital crítica en estudiantes secundarios. *Revista de Pedagogía Crítica*, 27(4), 91–109.
- Gómez, L., & Barrenechea, E. (2024). Ciudadanía y tecnologías en el Perú. *Revista Andina de Ciencias Sociales*, 6(2), 77–92.

- Gutiérrez-Aguilar, O., Chávez-Salazar, A., & Barreto-Huamani, W. (2024). Habilidades digitales y ciudadanía digital en el Perú. *Revista Peruana de Educación*, 29(3), 112–131.
- Helsper, E. (2021). *The digital disconnect: The social causes and consequences of digital inequalities*. SAGE.
- Jiménez, R., & Lazo, G. (2023). La confianza institucional en la participación digital. *Revista de Ciencia Política Aplicada*, 12(1), 33–49.
- Kellner, D., & Share, J. (2021). Critical media literacy as transformative pedagogy. *Journal of Media Literacy Education*, 13(1), 49–60.
- López, J. F., & Salinas, M. (2022). Brechas digitales e inclusión social en comunidades rurales. *Inclusión y Desarrollo*, 11(1), 45–67.
- Martin, A. (2005). Literacy and the digital society. In A. Martin & D. Madigan (Eds.), *Digital literacies for learning* (pp. 43–58). Facet Publishing.
- Mendoza, D., & Flores, J. (2024). Participación ciudadana digital en jóvenes peruanos. *Revista Latinoamericana de Juventud y Sociedad*, 3(2), 102–119.
- Morales, A., & Ríos, C. (2023). Educación digital en tiempos de pandemia. *Perspectivas Educativas*, 17(3), 80–96.
- Muñoz, M., & Silva, P. (2022). Inclusión digital y género en América Latina. *Estudios Sociales Digitales*, 8(1), 34–52.
- Nabatchi, T., & Leighninger, M. (2020). *Public participation for 21st century democracy*. Wiley.
- Oliveros Fortiche, D. E. (2023). Participación digital en Bogotá. *Reflexión Política*, 25(52), 81–95.
- OECD. (2023). *OECD guidelines on digital government strategies*. OECD Publishing. <https://www.oecd.org/gov/digital-government>
- Page, M. J., et al. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- Paredes, L., & Ramírez, F. (2022). Formación ciudadana en la era digital. *Pedagogía Crítica y Ciudadanía*, 5(1), 23–41.
- Quispe, J., & Huerta, S. (2021). Tecnologías y desigualdad digital. *Revista Peruana de Ciencia Social*, 10(3), 67–82.
- Ramírez, K. (2024). Ciberseguridad y participación pública. *Revista de Políticas Públicas Digitales*, 9(2), 130–145.
- Rojas, H., & Valenzuela, C. (2022). Evaluación de plataformas de gobierno electrónico en municipios peruanos. *Gestión Pública y Democracia*, 6(1), 112–129.
- Ruiz-Cueva, L., Paredes, F., & Herrera, J. (2022). TIC y ciudadanía en el Perú. *Revista de Gestión Pública*, 4(2), 45–68.
- Sadowski, J. (2020). *Too Smart: How digital capitalism is extracting data, controlling our lives, and taking over the world*. MIT Press.
- Salazar, D., & Oré, J. (2023). El rol del docente en la alfabetización digital crítica. *Revista de Innovación Educativa*, 14(1), 91–108.
- Sánchez, V. (2021). Participación ciudadana digital en contextos urbanos. *Revista Metropolitana de Ciencias Sociales*, 15(3), 56–74.
- Scheerder, A., van Deursen, A., & van Dijk, J. (2017). Determinants of Internet skills, uses and outcomes. *Telematics and Informatics*, 34(8), 1600–1611. <https://doi.org/10.1016/j.tele.2017.07.007>
- Silva, L., & Pérez, M. (2021). Desigualdades digitales intergeneracionales. *Estudios de Sociedad Digital*, 4(2), 77–95.

- Springer, F. (2023). Media literacy and digital participation. *Journal of Media Literacy Studies*, 12(1), 45–66.
- Tan, S. Y., & Taeihagh, A. (2020). Smart city governance in developing countries: A systematic literature review. *Government Information Quarterly*, 37(4), 101512. <https://doi.org/10.1016/j.giq.2020.101512>
- UNESCO. (2021). *Media and information literacy curriculum: A resource for educators and learners*. UNESCO Publishing.
- Venancio-Flores, A., & Alcudia de la Fuente, D. H. (2024). Gobernanza digital en Iberoamérica. *Revista de Derecho Ciudadano*, 16(1), 365–392.
- Vera, E. V., & Santos, O. C. (2025). Alfabetización digital y habilidades investigativas en la UNMSM. *Revista IGobernanza*, 8(29), 166–194.
- Zambrano, C., & Valdez, M. (2023). Ciudadanía activa y redes digitales. *Revista de Comunicación Política*, 13(4), 102–120.