Digital literacy in the communication

skills of peruvian teachers in times of the Covid -19 pandemic: A systematic review

Alfabetización digital en las competencias comunicativas de los docentes del Perú en tiempos de pandemia Covid -19: Revisión sistemática

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Resumen

El artículo describe la importancia de la alfabetización digital de los docentes de las instituciones educativas del Perú, así como el desarrollo de sus competencias comunicativas en las clases sincrónicas con sus estudiantes en tiempos de pandemia Covid -19. La revisión teórica se realizó en artículos científicos de los últimos diez años indexados en base de datos bibliográficas como Scopus, Dialnet, Scielo, Redalyc, Academic y Proquest bajo la metodología de la revisión sistemática PRISMA. Se evaluaron y seleccionaron 18 artículos de un total de 52 publicados entre los años 2012 y 2022. Los resultados demuestran que es de suma importancia que los docentes desarrollen sus competencias digitales como comunicativas.

Palabras claves: Alfabetización digital, competencia digital, competencias comunicativas, calidad educativa.

Abstract

The article describes the importance of digital literacy for teachers in educational institutions in Peru, as well as the development of their communication skills in synchronous classes with their students in times of the Covid -19 pandemic. The theoretical review was carried out in scientific articles of the last ten years indexed in bibliographic databases such as Dialnet, SciELO, Redalyc, Academic and Proquest under the PRISMA systematic review methodology. Eighteen articles were evaluated and selected from a total of 52 published between 2012 and 2022. The results show that it is of the utmost importance that teachers develop their digital and communicative skills.

Keywords: Digital literacy, digital competence, communication skills, educational quality.

Introduction

Information and communication technologies (ICT) are changing rapidly, clearly impacting society, so that citizens require urgent instruction, teachers being a key group to whom digital literacy should be provided, based on knowledge of the use of programs such as: creation of presentations, spreadsheets, word processors, surfing the Internet, also the use of various tools and other similar resources¹. Which due to the time of

the pandemic are being applied in greater demand; as well as the creation of digital content that will contribute to communication with students through remote or distance classes.

The current situation that is going through the world due to confinement by COVID-19 and biosecurity protocols to prevent its expansion changed the way teachers guide and

the way students learn, therefore, the use of Virtual Environments of Learning (EVA) is essential in order to enable the educational act from a participatory, creative and rational perspective. It has been shown that a number of teachers from both Peru and other countries are not prepared to face remote or virtual classes, showing deficiency in the teaching-learning process since they are unaware of the development in virtual environments or the use of digital tools. for work and communication with their students.

Given this, Unesco in 2020 in its reports Framework of Competences of Teachers in the field of ICT and ICT in education shows its concern in the educational field for the panorama that is experienced throughout the world, as well as in Latin America specifying that the form of planning of teachers and the application of information and communication technologies (ICT) must be redefined in order to change and renew the learning. It is also necessary to regularly update and reform educational systems, emphasizing the professional training of teaching staff, ensuring that all teachers can make the most of the use of technology for educational purposes, since ICTs can improve, enhance and innovate education. It should be noted that bringing teachers closer to technology and its use in the educational field has been a concern of the international community for years. The use of this term of digital literacy has been mentioned since the end of the 1990s, adapting and enriching itself to the changes in the digital society itself. It is an unresolved issue, but it has already started and cannot be stopped, where more and more professionals, including teachers and other people, are immersed4.

At the national level, there was also evidence of a lack of qualified teachers to carry out virtual education, as a country there was no strategic plan for continuity of education. The pandemic reflects the digital divide that is the absence or lack of knowledge of people to interact with technology⁵. Faced with the problem presented by the Ombudsman's Office in its report Education in the face of the health emergency, it emphasizes the obligation of the State to guarantee the right to education, but also recognizes that complying with this obligation constitutes a great challenge in a country like ours., due to the lack and deficiency of public services such as electricity and internet in areas of poverty and extreme poverty, adding to this the ignorance of the use of digital tools by teachers making the problem even bigger.

The Ministry of Education, aware of the problem, arranged, through the Perueduca platform and allied institutions such as Fundación Telefónica, teacher self-training courses so that in some way the gap presented decreases with the digital literacy provided to all teachers participating in these courses to this was added the Aprendo en Casa platform so that education continues in every corner of the country.

The objective of this systematic review is to describe the importance of digital literacy in the communication skills of teachers in Peru in times of the Covid-19 pandemic.

The conceptualization of digital literacy is very important, but we must start from the concept of "literacy" refers to the acquisition of literacy of the subjects to carry out an effective communication process, but what is "digital literacy", refers to the knowledge that is acquired in the digital field in order to develop new content either individually or cooperatively, which is shared with other people using technology. Likewise, it is mentioned that a digital illiterate is not only one who does not know how to function in the digital field, but one who has limited or no access to ICT^{7,8}.

Today, a cultured man is not only one who reads and writes, but one who develops skillfully in the digital space using various menus or the keyboard, the one that can navigate cyberspace using the different technological and digital tools⁹. In relation to the above, it is mentioned that digital literacy distinguishes three dimensions that every person must develop:

1. Critical understanding. 2. The use of technology. 3. The creation and communication of digital content. Therefore, it becomes extremely important to digitally literate people so that their development is adequate in an increasingly digital context¹⁰.

The word competition makes us think of ability or quality related to the human being to perform some operation. It is knowing how to do some work or activity with suitability¹¹.

Based on the above, communicative competence is defined as a set of knowledge, skills, abilities or aptitudes necessary in human relations within the coexistence between two people or more using the oral and written code, in other words, it is listening and speak, read and write conveniently. For communication to be effective, the cultural habits, social customs and emotions of the participants must be taken into account in order to satisfy needs, if the communication is not precise, there is no understanding, it cannot be classified as such¹²⁻¹⁴.

As can be seen, communicative competence in society is important and within the educational field more so, since the teacher is in direct contact with the students, before the pandemic in the classrooms and now through technological devices.

Therefore, future teachers must be conditioned in promoting their communication skills and other knowledge that will help them in their professional training, since dialogue and communication intervene in the teaching process, that is, the teacher must know how to interact with their students. students using verbal, non-verbal and paraverbal language. So, the communication that occurs between the teacher and the student is not only the transmission of knowledge, it is the beginning of social interaction, so it must be based on an emotional connection taking into account age and grade. In addition to this, the teacher must expand their culture knowing the context in which they operate, they must be empathic and handle conflict situations through persuasion or negotiation, in other words, the teacher's communication must have meaning and directionality¹⁵⁻¹⁸.

To speak of communicative competence in the pedagogical field is to speak of a professional competence focused on expression, active listening and interpretation that every teacher must perfect during their practice, guaranteeing the



successful development of the tasks and functions of the profession, therefore, it is a work tool and a professional requirement¹⁹.

Apparently, it is important today that teachers at various levels assume the responsibility of being trained in the use of digital tools to fully fulfill the function of teaching and also develop their communication skills in an integral way. Despite the context, the teacher does not lose the art of being a social agent. Likewise, as trainers, they are responsible for digitally literating their students or bringing them closer to the use of technology, being a companion and model^{20,21}.

Methodology

The exploration of scientific publications was carried out based on the PRISMA methodology, investigating databases such as: Scopus, Scielo, Dialnet, Redalyc, Alicia, Academic and Proquest. The search was carried out using keywords such as "digital literacy" and "communicative competence".

Of the 52 articles obtained, the titles and abstracts were reviewed, preparing bibliographic and summary tables to classify those articles that resemble the subject of study. The articles whose potential responds to the objective of the work were examined in a complete and thorough manner.

Scientific articles published in indexed databases, in Spanish, between the years 2012 and 2022 that described the concept and importance of digital literacy in teachers, as well as the conceptualization and importance of communicative competence in professional teacher development, were included.

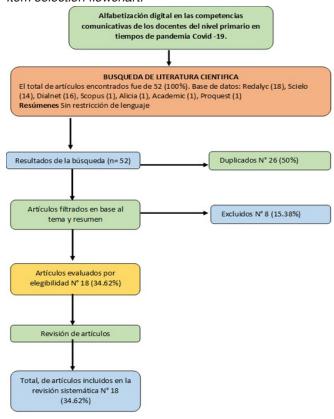
The exclusion process was carried out through two phases: the first phase involved the exclusion of articles published in two or three databases, with a total of 26 duplicate articles. As a second phase, articles filtered based on the topic and summary were taken as indicators, excluding 8 because they were not related to the review topic.

Results

After the search process, 52 scientific articles were obtained from the last ten years, 2012 to 2022, located as follows: Redalyc 18, Scielo 14; Dialnet 16; Alice 1; Scopus 1; Academic 1 and Proquest 1.

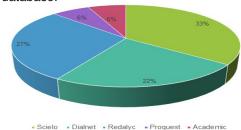
After the first review filter, which was to remove duplicates, 26 articles remained. Subsequently, to determine if they are related to the stated objective, inclusion and exclusion criteria were applied, excluding 8 articles, finally leaving a total of 18 articles that are oriented to our systematic review as shown (Figure 1).

Item selection flowchart.

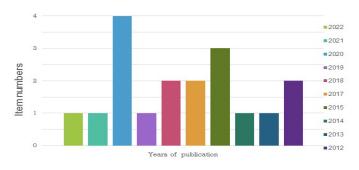


The 18 designated scientific articles, according to the data-base, were cataloged as follows: Scielo (33.3%), 6; Dialnet (22.2%), 4; Redalyc (27%), 5; Proquest (5.6%), 1; Scopus (5.6%), 1 and Academic (5.6%), 1. As well as it can be appreciated (Figure 2).

Circular graph, of the scientific articles selected according to the database.



The scientific articles used were published in different years, fluctuating between 2012 and 2022 as detailed (Figure 3).



Similarly, the study approach of the selected articles was identified, with 11 articles under the qualitative approach and 7 under the quantitative approach, which can be seen below (Figure 4).



Number of articles

Likewise, of the 18 articles, 11 come from Latin American countries and 7 from the European continent.

Finally, table N° 01 shows the characteristics of the selected sources such as: database, year, journal, title, author(s), country and focus.

Table 1 Tota	al list of sci	ientific articles used	1			
Database	Year	Magazine	Title	Author(s)	Country	Focusing
Scopus	2002	Comunicar	Competencias TIC y mediáticas de los docentes. Convergencia hacia un modelo integrado MIL-TIC	Gutiérrez-Martín, A. Pinedo-González, R., Gil- Puente, C	España	Cuantitativo
Scielo	2020	Conrado	Alfabetización digital como sustento del teletrabajo para docentes universitarios: hacia una sociedad inclusiva.	Quezada, M. Castro, M. Oliva, J. Gallo, C. Quezada, G.	Cuba	Cuantitativo
Redalyc	2020	Educare	El área de información y alfabetización informacional de la competencia digital docente.	Moreno-Guerrero, A. Miaja-Chippirraz, N. Bueno-Pedrero, A. Borrego-Otero, L.	Costa Rica	Cuantitativo
Scielo	2020	Comuni@cción	Delimitando al concepto de Alfabetización: Una propuesta para un mejor entendimiento.	Aguilar, J. Moctezuma, A.	Perú	Cualitativo
Dialnet	2018	International Journal of New Education	Competencia digital y alfabetización digital de los adultos (profesorado y familias).	Peñalva-Vélez, A. Napal, M. Mendioroz, A.	España	Cuantitativo
Redalyc	2017	Razón y Palabra	Alfabetización Digital.	García, S.	Ecuador	Cualitativo
Scielo	2014	Revista Integra Educativa	La alfabetización digital y la formación de la ciudadanía del siglo XXI.	Area, M.	Bolivia	Cualitativo
Dialnet	2015	Perspectivas en el siglo XXI	De la alfabetización digital a la práctica digital.	Pérez, P. Pedrero, L.	España	Cualitativo
Scielo	2013	Medisur	Evolución de la alfabetización digital: nuevos conceptos y nuevas alfabetizaciones.	Avello, R. López, R. Cañedo, M. Álvarez, H. Granados, J. Obando, F.	Cuba	Cualitativo
Dialnet	2021	Polo del conocimiento	Las competencias comunicativas como factor fundamental para el desarrollo social.	Valdez-Esquivel, W. & Pérez-Azahuanche, M.	España	Cualitativo
Redalyc	2020	Educere	Competencia comunicativa en profesores venezolanos de Comunicación Social.	Grimaldo, R.	Venezuela	Cuantitativo
Dialnet	2019	Enseñanza & Teaching	Un estudio cualitativo sobre la competencia didáctica comunicativa de los docentes en formación.	Camus, M. Iglesias, M. Lozano, I.	España	Cualitativo
Proquest	2018	Complutense De Educación	La competencia comunicativa en el grado de maestro de infantil y primaria. una propuesta de criterios de desempeño como instrumento para su análisis y evaluación.	Neira, M. Sierra, B. Pérez, M.	España	Cuantitativo
Scielo	2017	Transformación	La competencia comunicativa del docente en el ámbito escolar.	Pérez, Y.	Cuba	Cualitativo
Academic	2015	Anais Temporários	Competencias comunicativas en foros virtuales. Una experiencia de colaboración entre docentes.	Ruiz, E. Martínez, N. Galindo, R. Galindo, L.	Brasil	Cualitativo
Scielo	2015	Revista Universidad y Sociedad	La competencia comunicativa en la labor pedagógica.	Pompa, Y. & Pérez, I.	Cuba	Cualitativo
Redalyc	2012	REICE	Las competencias comunicativas y lingüísticas, clave para la calidad educativa.	Reyzábal, M.	España	Cualitativo
Redalyc	2012	Ciencias Holguín	La competencia comunicativa del maestro de la Educación Primaria.	Cruzata-Guzmán, R. Salazar-Salazar, <mark>M.</mark>	Cuba	Cuantitativo

Of the 18 articles selected, 9 are linked to digital literacy and 9 to communication skills.

Regarding digital literacy, we find that it is conceptualized as the acquisition of knowledge to interact in the digital field in an appropriate manner, making use of technological and digital tools, as well as the development of new content^{7,8,9,10}. Therefore, highlight the importance of digital literacy in all professionals including teachers^{1,4,5,14}.

Likewise, communicative competence is described as a set of knowledge that allows two or more people to understand each other adequately, either by speaking or listening and writing or reading¹¹⁻¹³.

The studies consulted preponderate the importance of communication from the teacher to the students, emphasizing that knowledge is not only imparted, therefore, it is up to teachers to improve their pedagogical practice^{15,16,17,18,19}.

Regarding the importance of digital literacy in the communication skills of teachers, the authors agree on the responsibility that falls on teachers to update themselves in the use of digital tools, as well as the development of their communication skills, even more so in these times. going through thus fulfilling the function of teaching without ceasing to be a social agent^{20,21}.

Discussion

The importance and concern of digital literacy in teachers is reflected in the literature from various sources. It is an issue that has not only been mentioned in recent years^{9,10}, but what happened during the pandemic where it became clear that several teachers were not prepared to face remote or distance classes due to ignorance of digital technologies and tools, feeling affected. Situation that not only afflicted Peru but also other countries.

Just as the teacher develops his digital competence, he must not leave aside the communicative competence which is his work tool, since he is a social agent that guides the interrelation between students in an assertive, empathic and tolerant way, agreeing with different authors when mention that communication skills are essential for social developmentl^{15,17}.

Finally, it is worth mentioning that each teacher as a professional is responsible for training or updating according to the advances that are taking place in the world. Teaching is a dynamic profession that goes hand in hand with the times, what was good at one time will not necessarily be good now. It is known that the Peruvian State, through the Perueduca platform, constantly implements self-training courses to develop digital teaching competence.

Conclusion

According to the literature review, digital literacy is extremely important within the educational field, teachers as mediators or facilitators of knowledge must be constantly updated with the objective of being part of it.

All professionals, in this case teachers, must develop their digital skills and be prepared to continue education remotely, hybrid or face-to-face using the various digital tools.

Communication brings us closer to people, therefore, increasing communication skills enables teachers to be more in contact with their students, not only transmitting knowledge but also initiating social development.

Higher schools of education within their curriculum must include the development of digital skills such as communicative skills in order to have qualified graduates who reflect a good preparation in the field of teaching.

To improve educational quality, teachers are needed who are aware of the progressive changes that arise in society, therefore, they commit to updating themselves, achieving their teaching improvement.

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