

Pedagogical Competencies Oriented to Teacher Performance: A Systematic Review

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Abstract

This article has the purpose of carrying out a systematic review on the pedagogical competences oriented to teacher performance in regular basic education in Latin America. For which, it was necessary to identify the pedagogical competences that teachers present, as well as the competences that they lack in order to determine their orientation towards teaching performance. For this process, the PRISMA methodology was followed in order to show the information more clearly and in a synthesized way. This article collected information from the Scopus, Scielo, Dialnet and Redalyc databases, in a target time of 6 months within which the identification, screening and eligibility process was carried out. Regarding the inclusion criteria, it was established that the articles must be scientific and systematic review articles extracted from reliable sources such as Scopus, Scielo, Dialnet, and Redalyc, with a maximum age of 23 years, and written in English, Spanish, and Portuguese. Regarding the exclusion criteria, empirical information was removed such as: summaries, news, forums, reports, theses, essays, etc., as well as articles dating from periods prior to 2000. The results indicated that teachers require the development and reinforcement of skills that go beyond the simple transmission of knowledge, since they require making certain adjustments in their profile according to the requirements of today's society. Likewise, it was found that teachers lack digital skills, this being an essential skill today. Therefore, it is suggested that the state provide support through the implementation of policies that encourage the use of technologies in education, in order to train digital skills in both the teacher and the student.

Key words: Pedagogical competencies, teaching performance, regular basic education.

INTRODUCTION

Currently, the practice of the teacher is considered an activity of extreme complexity, since the exercise of their work has been subject to undergo adjustments and constant transformations due to the changes that have been taking place in the education sector, bringing with them, new demands and requirements in terms of teaching competencies (De Oliveira, et al., 2023).

During this pandemic process, many academic activities were interrupted, moving from a face-to-face (traditional) modality to a virtual one, where teaching processes had to undergo certain transformations, forcing many teachers to discover new skills to adapt and improve themselves, having to show a resilient attitude in the face of the situation they were experiencing (Llopis, et al., 2022). However, many of these teachers presented some discomfort during the process, manifesting certain levels of tension, anguish, and fear due to the situation they experienced, stress, tiredness, and exhaustion due to the new conditions that led to work overloads (Cordero, 2022), as well as great concern about maintaining their performance levels in the face of the deficiencies they presented in terms of digital skills (Cavalcante and Cavalcante, 2022). Is What undoubtedly, having the necessary resources and means, using appropriate teaching strategies and having the necessary competencies leads to good teaching performance (Jiménez, et al., 2022).

While it is true, the Peruvian Ministry of Education, through Law 29944, promoted the evaluation of teacher performance, emphasizing the monitoring and accompaniment of teaching practice in the classroom. In view of this, UNESCO said that, in order to achieve the improvement of learning, it is necessary to promote that

educational projects prioritize the management of teacher quality with good training and the continuous strengthening of their capacities in different aspects such as planning, accompaniment and feedback of learning. For this reason, this article seeks to relate the importance of pedagogical competencies for teachers in regular basic education with good performance in order to achieve quality learning.

At the same time, the 2030 education agenda is underpinned by Sustainable Development Goal 4, which aims to ensure inclusive and quality education by promoting learning opportunities for all; Achieving these objectives implies ensuring relevant learning. Therefore, to ensure a good education, it is necessary for teachers to be trained and prepared based on competencies, in order to be able to carry out quality work (Carro, et al., 2016; and Sarceda, et al., 2020).

In this regard, Valle, et al., (2022) from a pedagogical approach described the term competence as the set of knowledge and necessary knowledge that a teacher must possess to achieve their comprehensive training, which is reflected in the performance of their tasks and in the achievement of their objectives. In this sense, teachers must have the necessary skills to be able to transform their practice by training their students based on the requirements of the environment.

Therefore, pedagogical competencies play a fundamental role in the teaching-learning process of students in Regular Basic Education, since these competencies will allow interaction between teachers and students, generating meaningful learning with responsibility and autonomy (Gratacós, et al., 2021). It is also necessary to specify that formative assessment as a support procedure has had a positive impact on the development of teaching competencies (Cañadas, et al., 2021), since they have served as a regulatory tool for the profession, allowing it to reflect better performance in its work, y therefore, providing quality education (Sánchez & Manso, 2022).

For this reason, the teachers of tomorrow require the development of competencies that go beyond the simple transmission of knowledge, since they need to make certain adjustments in their profile according to the requirements of today's society. In this regard, Román, et al., (2021) stated that teacher training must be implemented under a humanistic vision of competencies, which allows them to be trained to develop in learning contexts that associate theory and practice, being possible to solve problems that come from educational practice and enable the exercise of their teaching work in the stage for which they have been trained.

Regarding teacher performance, Estrada, et al., (2021) specified that this term commonly refers to the actions that teachers assume during the process of developing their pedagogical activities, however, their function is not necessarily limited within the classroom, but also encompasses all those procedures that they carry out outside of it, Therefore, nowadays this term focuses on innovation and paradigm shifts in order to achieve the development of learning through the management of resources that allow the educational act to become viable.

In this regard, Lucumi and González (2015) indicated how necessary it is for teachers to master ICT from its three areas: (a) the instrumental field refers to the technological resources to be used, (b) the cognitive field, which refers to the development of knowledge to know how to search, identify, select and integrate important information, and (c) the attitudinal field, that involves the development of attitudes and values regarding the use of technology, therefore, it is necessary for the teacher to know about it, and not only in a practical way, but also to transmit a rational and critical use, acting ethically.

Estrada and Mamani (2021), when analyzing the digital competencies of Peruvian EBR teachers during the 21st century through a systematic review, found that teachers carry out their work without taking into consideration the needs of the environment, evidencing a lack of innovation in terms of the implementation and use of ICTs. However, some Latin American countries are favored in terms of policies that promote proper development in the classroom, but in the case of Peru, the MDBDD for evaluation purposes only establishes performance in the classroom, and does not incorporate the necessary criteria such as the management of digital competencies, being considered as a fundamental requirement its modification.

The purpose of this article is to carry out a systematic review of the pedagogical competencies oriented to teacher performance in regular basic education in Latin America. To this end, we sought to know the number of articles related to pedagogical competencies and teaching performance according to the year of publication considered in

the databases of Scopus, Scielo, among other databases, as well as to compare the sources based on the topic of study of countries that come from Latin America. Therefore, the aim of the study was:

Objective

Identify the pedagogical competencies that are oriented to teaching performance, taking as a reference the information found in the databases consulted.

METHODOLOGY

This article includes the development of a systematic review of descriptive characteristics in which the topic of pedagogical competencies oriented to teacher performance was addressed.

According to Moreno et al. (2018), systematic literature reviews are expressed in terms of clear, precise, coherent summaries and are structured based on existing and updated information, aimed at answering a specific question; Since they are made up of a variety of material and sources of information, they are recognized as having a high level of scientific evidence. It also makes a significant contribution to improving knowledge in the field under analysis (Silva, et al., 2005). Therefore, it provides the researcher and the reader with clear and precise information on the subject (Quispe, et al., 2021). In addition, it allows you to give answers to a number of research questions, examine the scope, range, and nature of scientific evidence, determine whether information is necessary for the phenomenon of interest, summarize and disseminate findings from existing evidence, identify knowledge gaps in existing scientific evidence, clarify key concepts, and report on the types of studies that address and inform practice in a particular area, and map the existing scientific evidence in a particular area (Lam, 2016; and Fernández, et al., 2020).

To develop this article, the Cochrane system and the PRISMA methodology were taken as a reference, which is based on an ordered structure rigorously carried out in order to obtain reliable and high-level results. Pardal and Pardal (2020) mentioned in this regard that review articles must meet the following requirements: it must formulate a main question, followed by secondary questions, then the criteria for eligibility must be planned, the methodology to be followed, and once this has been raised, apply the established criteria, collect the data through a structure which must be oriented to achieve the objectives, and analyze the risks of research, evaluate that the articles are of quality, show the results, interpret them, and once considered, provide suggestions based on bibliographic evidence. In this sense, as mentioned in Sabaj (2009) Great care must be taken in terms of writing, avoiding errors. Therefore, they must have a certain specification in such a way that they can be reproduced by any reader (Villagrán & Harris, 2009).

Research Questions

Having previously described the real situation of pedagogical competencies oriented to teaching performance, the following question was established as a central question: What are the pedagogical competencies that are oriented to teaching performance taking as a reference the information found in the databases consulted?

DEVELOPMENT AND DISCUSSION

As a result of the tracking process carried out in the consulted databases, such as Scielo, Dialnet, Redalyc, and Scopus, taking into account the combination of various keywords, the following table was detailed:

Table 1. Search result in databases using combined words

Combined Words	Database				Total
	Scielo	Scopus	Dialnet	Redalyc	
Pedagogical competencies	295	33	6,290	227,423	234,041
Teaching performance	760	93	5,498	243,352	249,703

Competency-based teaching profile	7	1	550	669,739	670,297
Teaching competencies	1,205	192	16,504	247,643	265,544
Professional competencies	1,416	134	16,261	252,302	270,113
Teacher Leadership	120	12,539	580	55,995	69,234
Changes in education	3,176	100	33,120	467,360	503,756
Competencies in teacher education	186	21	6,756	352,439	359,402
Pedagogical Competencies in Teachers	111	6	2,938	281,499	284,554
Pedagogical Competencies and Teaching Performance	14	-	410	334,957	335,381
Competencies and teacher training and regular basic education	1	-	58	581,364	581,423
Digital Competence and Regular Basic Education	1	-	44	564,831	564,876
Competency-based assessment and teaching performance	67	1	534	439,184	439,786
Impact of pedagogical competencies on performance	2	-	96	472,583	472,681
Pedagogical skills and basic education	14	-	766	502,409	503,189
Strategies for the development of pedagogical competences	40	4	1,182	567,051	568,277
Total	7,415	13,124	91,587	6,260,131	6,372,257

After carrying out the processes of identifying sources, establishing eligibility criteria, search strategies and selection processes, the work was reduced to 41 articles associated with pedagogical competencies oriented to teaching performance.

As part of the process, a PRISMA flowchart was produced to detail the guidelines that will allow the information to be documented. Stovold et al. (2014) pointed out that the prism methodology allows information to be displayed more clearly, and can be synthesized by identification, screening and eligibility procedures (Yepes, et al., 2021; and Page, et al., 2021).

The detailed procedure using the prism diagram is shown below:

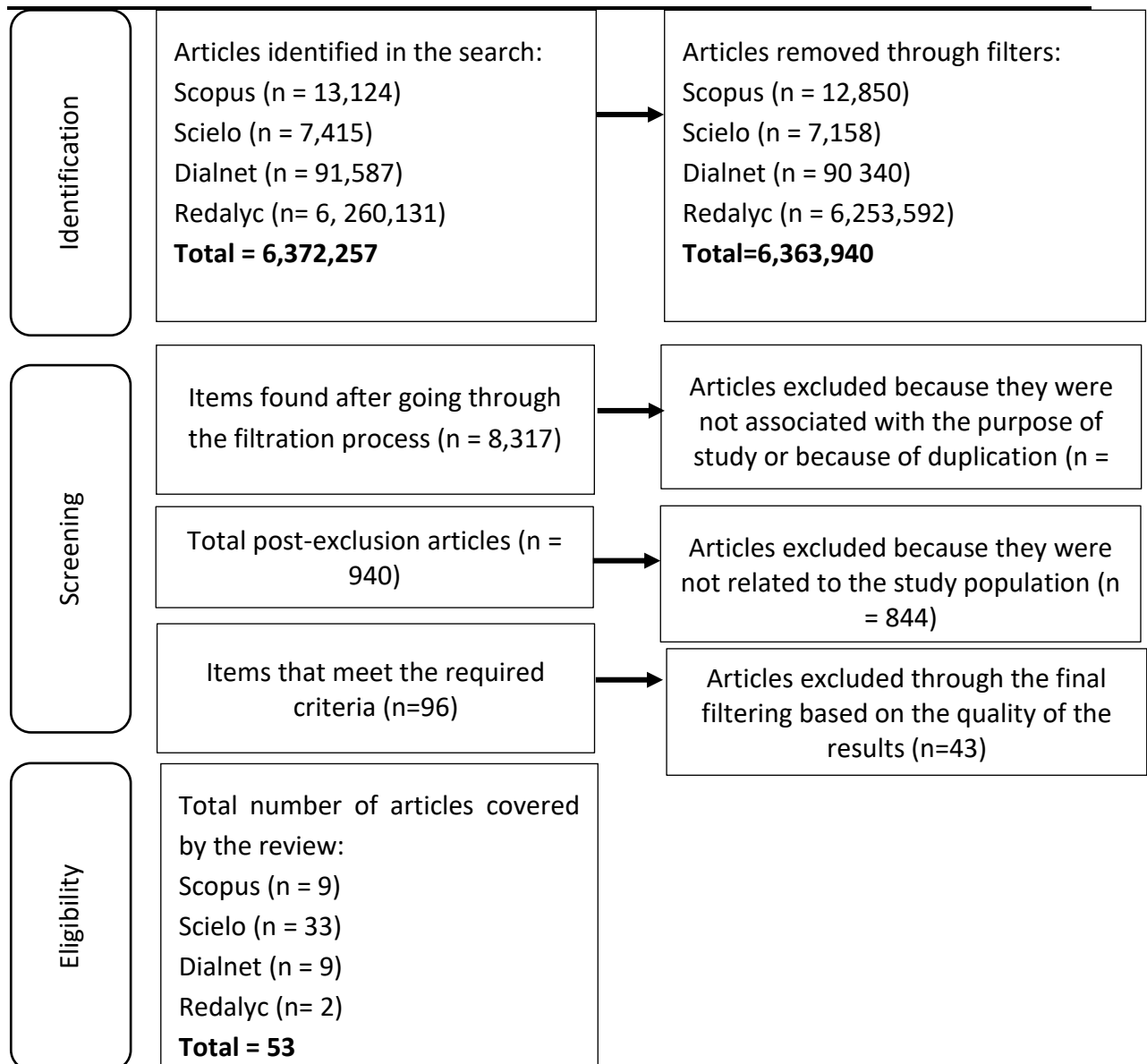


Figure 1. PRISMA Adaptation Flowchart (Stovold, et al., 2014)

The diagram presented in Figure 1 shows that of the 6,372,257 articles identified in the databases considered, 6,363,940 were withdrawn in the first filtering process because they did not meet the requirements stipulated in the inclusion and exclusion criteria, resulting in 8,317 articles, which, After being thoroughly analyzed, they went through a second filtering process in which 7,377 more articles were excluded because they were not associated with the objective of the study, in addition to finding duplication of information, leaving 940 articles to continue with the evaluation. However, 844 articles were found with interesting material, but focused on university students, therefore, as they did not focus on students of regular basic education, they were also excluded, leaving only 96 articles that do meet the required criteria. Then, through a final filtering based on the quality of the results, 43 more articles were excluded because they contained incomplete information, finally leaving a total of 53 articles with which the present systematic review was elaborated. Below is the matrix table of the items used.

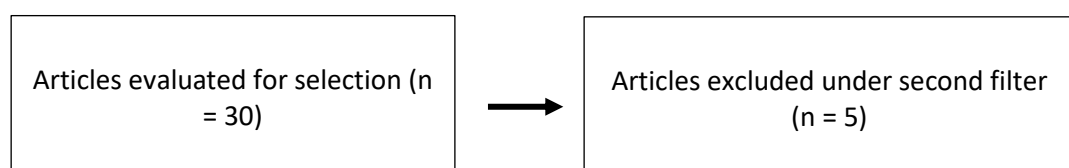


Table 2 Base Matrix of Collected Articles

N ^o	Database	Doc Type	Country	Author	Year	Article Title
1	Scielo	AC	Brazil	De Oliveira, et al.	2023	Changes to the teaching practice of teachers in initial training in physical education in children's education.
2	Scielo	AC	Brazil	Cavalcante, and Cavalcante	2022	The challenges of teaching in Basic Education during the COVID-19 pandemic in the city of Lábrea, Amazonas, Brazil.
3	Scielo	AC	Costa Rica	Llopis, et al.	2022	Resilience in university teachers: Facing challenges in times of pandemic.
4	Scielo	AC	Costa Rica	Lamb, T.	2022	Discomforts and positive adaptations of professors of the University of Costa Rica in times of the COVID-19 Pandemic
5	Scielo	AC	Ecuador	Jimenez, et al.	2022	Virtual Didactic Strategies: Important Components in Teaching Performance.
6	Scielo	AC	Cuba	Valle, et al.	2022	The formation of scientific competence in teachers in research projects
7	Scielo	AC	Mexico	Carro, et al.	2016	Professional training and teaching skills in the state of Tlaxcala.
8	Scielo	AC	Ecuador	Espín, G., and Juanes, B.	2021	Pedagogical competencies in the professors of Business Administration at the Metropolitan University of Ecuador.
9	Scopus	AC	Spain	Gratacós, et al.	2021	A study of teacher leadership concept in institutional documents in Spain
10	Scopus	AC	Spain	Cañadas, et al.	2021	Perception of the impact of formative assessment on professional competencies during initial teacher training.
11	Scopus	AC	Spain	Sarceda, et al.	2020	Teaching competencies in the initial training of secondary school teachers.
12	Scopus	AC	Spain	Sanchez, and Manso	2022	The Competencies of Secondary School Teachers in Spain: The Evolution of the Teacher Profile in Initial Teacher Training Programs.
13	Scielo	AC	Peru	Gálvez, and Milla	2018	Teacher Performance Assessment: Preparing Students for Learning in the Good Teacher Performance Framework.

1 4	Scielo	AC	Peru	Estrada, and Mamani	2021	Digital competence and sociodemographic variables in Peruvian teachers of regular basic education.
1 5	Scielo	AC	Peru	Estrada, et al.	2021	Professional burnout and its relationship with the performance of regular basic education teachers.
1 6	Scielo	AC	Chile	Román, et al.	2021	Profile of the inclusive primary school teacher: oriented to the transformation of the training process in the official educational institutions of the district of Cartagena-Colombia.
1 7	Dialnet	AR	Peru	Silva, et al.	2021	Managerial pedagogical leadership in regular basic education: Systematic review.
1 8	Dialnet	AR	Peru	Aguirre, et al.	2021	The Continuing Education of Early Childhood Basic Education Teachers in Latin America: A Systematic Review.
1 9	Dialnet	AR	Spain	Miotto, et al.	2022	Systematic review on initial teacher training in digital technologies: initiatives and possibilities.
2 0	Dialnet	AR	Mexico	Chim, and Zapata	2022	Digital Competencies of Secondary School Teachers in Ibero-America. A systematic review from 2011 to 2021.
2 1	Redalyc	AC	Argentina	Capuano, A.	2004	Performance appraisal: competency-based performance.
2 2	Redalyc	AC	Mexico	Rueda, M.	2009	Teacher Performance Evaluation: Considerations from the Competency-Based Approach
2 3	Dialnet	AR	Peru	Esquerre, and Perez	2021	Challenges of Teacher Performance in the 21st Century: A View of the Peruvian Case.
2 4	Dialnet	AR	Peru	Reyna, A.	2021	Digital Competencies and Teaching Performance in Latin American Schools
2 5	Dialnet	AR	Peru	Montalvo, et al.	2022	Digital Competencies in Teachers in Peru.
2 6	Dialnet	AC	Venezuela	Galvis, R.	2007	From a traditional teaching profile to a competency-based teaching profile
2 7	Scopus	AC	Spain	Marín, et al.	2010	Professional competences in the curriculum of primary teacher education from the perspective of the student. A case study of primary education

2 8	Scopus	AC	Spain	Pesquero, et al.	2008	The Professional Competencies of Primary School Teachers
2 9	Dialnet	AC	Spain	Zahonero, and Martín	2012	Comprehensive teacher training: towards the development of personal competencies and values in teachers
3 0	Scielo	AC	Costa Rica	Escribano, E.	2018	Teacher performance as a factor associated with educational quality in Latin America.
3 1	Scielo	AC	Peru	Soria, et al.	2020	Pedagogical Teaching Performance and Learning of University Students in the Education Career.
3 2	Scielo	AC	Ecuador	Reyes, et al.	2020	Considerations regarding compliance with ethical principles in scientific research.
3 3	Scielo	AC	Colombia	Ávila, et al.	2022	Determinants of the production of social science scientific articles in Colombia included in WoS-Scopus and other indices: classification tree and regression
3 4	Scielo	AR	Cuba	Luciani, and Morillo	2019	Challenges of scientific articles: bases for their elaboration and presentation.
3 5	Scielo	AC	Cuba	Ricardo, B.	2021	Some considerations on the writing of the scientific article
3 6	Scielo	AR	Chile	Moreno, et al.	2018	Systematic Reviews: Definition and Basic Notions
3 7	Scielo	AR	Mexico	Fernandez, et al.	2020	Exploratory Systematic Reviews as a Methodology for the Synthesis of Scientific Knowledge
3 8	Scielo	AR	Spain	Pardal, and Pardal	2020	Annotations for structuring a systematic review.
3 9	Scielo	AC	Uruguay	Patiño, and Carvalho	2018	Inclusion and exclusion criteria in research studies: definitions and why they matter
4 0	Scielo	AR	Peru	Quispe, et al.	2021	Scientific Writing Series: Systematic Reviews.
4 1	Scielo	AC	Colombia	Lucumi, and Gonzalez	2015	The digital environment in communication, attitude and pedagogical strategies used by teachers
4 2	Scopus	AR	Croatia	Page, et al.	2021	The PRISMA 2020 statement: an updated guideline for reporting systematic reviews

4 3	Scopus	AR	United Kingdom	Stovold, et al.	2014	Study flow diagrams in Cochrane systematic review updates: an adapted PRISMA flow diagram.
4 4	Scopus	AR	Spain	Yepes, et al.	2021	PRISMA Statement 2020: An Updated Guide for the Publication of Systematic Reviews.
4 5	Scielo	AC	Chile	Sabaj, O.	2009	Discovering some problems in the writing of Scientific Research Articles (CIA) by postgraduate students.
4 6	Scielo	AC	Cuba	Silva, et al.	2005	Basic elements to improve the writing of a scientific article
4 7	Scielo	AR	Chile	Villagrán, and Harris	2009	Some keys to writing a scientific article correctly.
4 8	Scielo	AR	Cuba	Padrón, et al.	2014	Important aspects of scientific writing.
4 9	Scielo	AR	Cuba	Lam, R.	2016	Writing a scientific article.
5 0	Scielo	AC	Colombia	Ochoa, et al.	2022	Perception of primary school students and teachers on scientific competencies associated with student cognitive development.
5 1	Scielo	AC	Chile	Cádiz, et al.	2012	Competent or humanizing teachers?
5 2	Scielo	AC	Peru	Maple, and Blumen	2022	Critical thinking, creativity, self-efficacy, and teaching practice in Peruvian teacher trainers.
5 3	Scielo	AC	Chile	Villarroel, and Bruna.	2017	Pedagogical Competencies That Characterize a University Teacher of Excellence: A Case Study that Incorporates the Perspective of Teachers and Students.

This information, collected in the matrix table, was organized according to certain criteria: year of age, database of origin, type of document, country of origin, and language.

Number of documents selected from databases

This article was based on four databases internationally recognized for their quality of information, giving a significant weight of high reliability to the selected documents. With regard to the bases consulted, the following is stated:

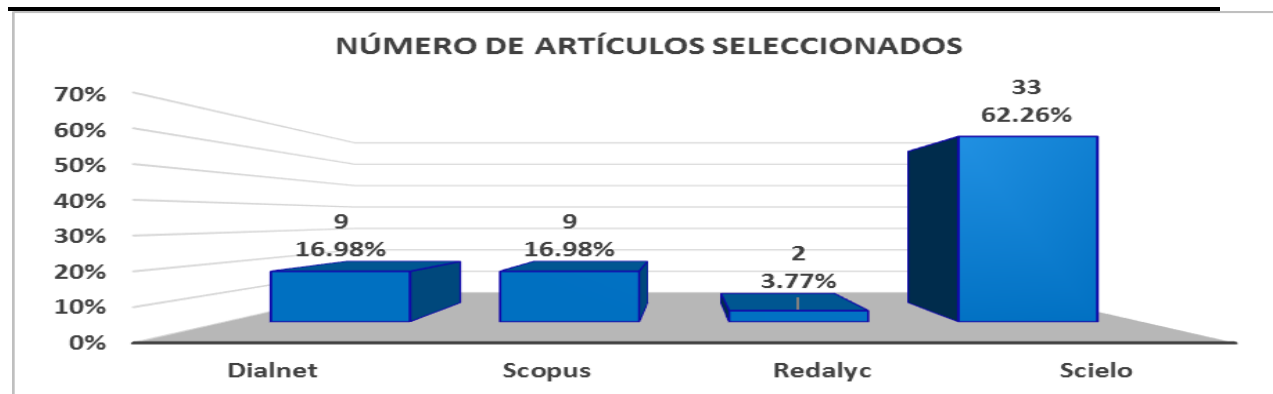


Figure 2. Number of documents selected from databases

The results obtained in Figure 2 show that this article was prepared with the support of 4 recognized databases, these being Dialnet, Scopus, Redalyc and Scielo, in which information associated with the topic under study was sought, managing to identify 9 articles (16.98%) in the Dialnet database, 9 articles (16.98%) in the Scopus database, 2 articles (3.77%) in the Redalyc database, and 33 articles (62.26%) in the Scielo database, noting that the database that contains the most information collected regarding pedagogical competencies oriented to teacher performance in regular basic education is the Scielo database.

Number of articles published per year

To develop this article, the established inclusion criteria were taken into consideration, which indicate that scientific or systematic review articles that contain information associated with the topic and that are no more than 23 years old (articles ranging from 2000 to 2023) must be considered.

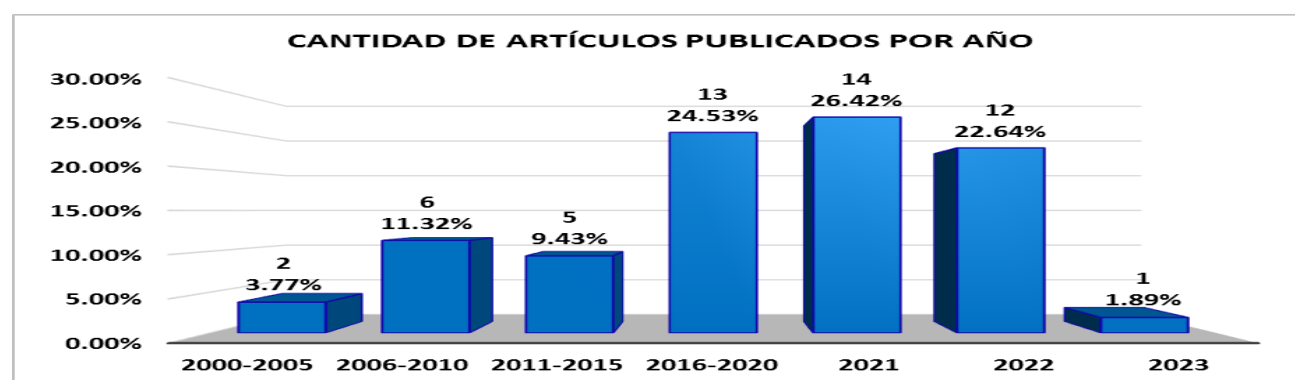


Figure 3. Number of articles published per year

The results of Figure 3 describe the number of articles identified based on the period of publication, finding that, of the 4 databases consulted, it was possible to select 2 articles that correspond to the years 2000 – 2005 and is equivalent to 3.77%, 6 articles that correspond to the years 2006 – 2010 and are equivalent to 11.32%, 5 articles that correspond to the years 2011 – 2015 and are equivalent to 9.43%, 13 articles that correspond to the years 2016-2020 and are equivalent to 24.53%, 14 articles that correspond to the year 2021 and are equivalent to 26.42%, 12 articles that correspond to 2022 and are equivalent to 22.64%, being only 1 recent article, which is equivalent to 1.89% and corresponds to 2023. Therefore, during 2021, a greater number of articles on the subject were published.

Number of items by document type

For the purposes of this article, the criterion was to consider scientific articles and systematic reviews that are associated with pedagogical competencies oriented to teaching performance, of which the following were identified:

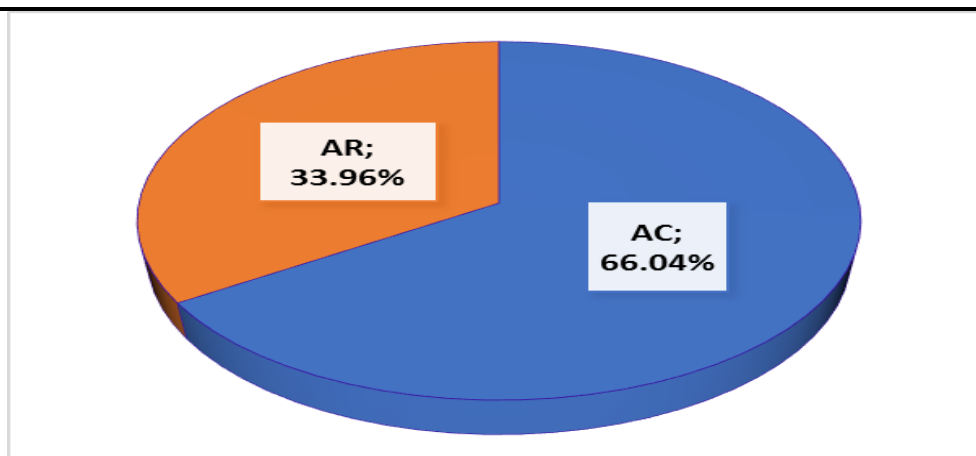


Figure 4. Number of items by document type

The results of Figure 4 show that the largest number of articles considered for the development of this work were scientific articles with 66.04%, 33.96% being systematic review articles. In this sense, it is demonstrated that the information used allows to guarantee the reliability of this work.

Number of items by country of origin

Below is a breakdown of the number of articles consulted with their respective country of origin:

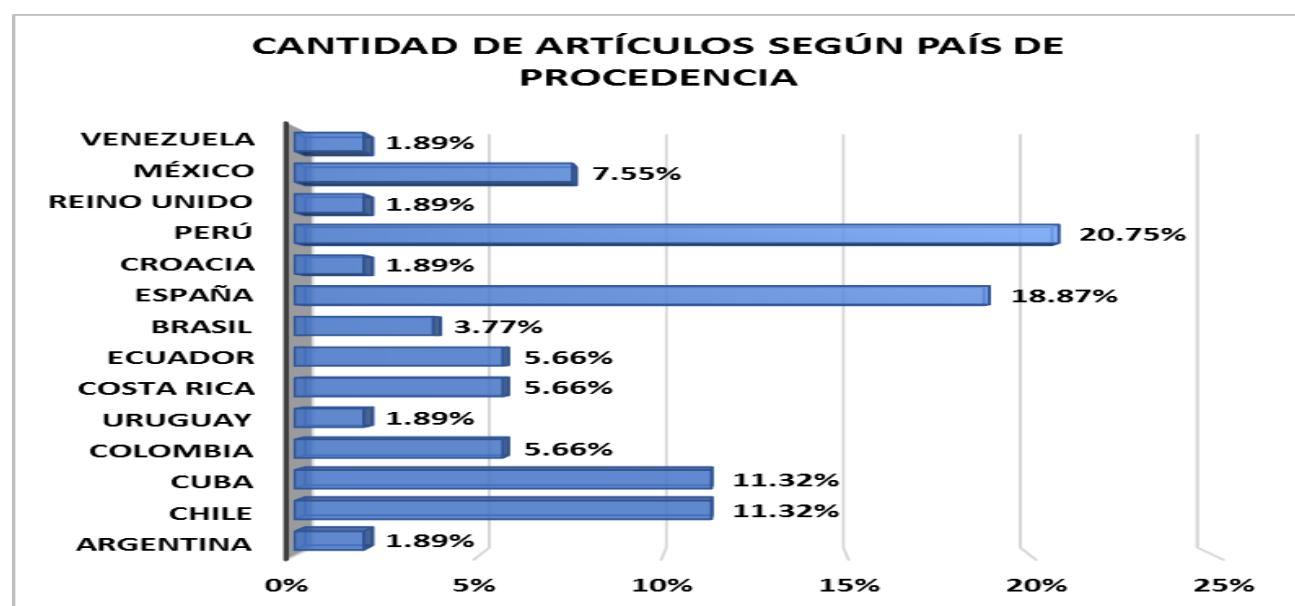


Figure 5. Number of items according to country of origin.

The results found in figure 5 show that 1.89% of the articles come from the country of Venezuela, 7.55% from Mexico, 1.89% from the United Kingdom, 20.75% from Peru, 1.89% from Croatia, 18.87% from Spain, 3.77% from Brazil, 5.66% from Ecuador, another 5.66% from Costa Rica, 1.89% from Uruguay, 5.66% from Colombia, another 11.32% from Cuba, 11.32% from Chile, and another 1.89% from Argentina. Therefore, these results show that the largest number of scientific and review articles were extracted from the country of Peru, followed by Spain, showing the importance that these countries give to pedagogical competencies and teaching performance.

Number of articles by language

Regarding this point, it was considered as one of the inclusion criteria that the language to be considered should be English, Spanish and Portuguese. Below is a breakdown of the number of articles collected in each language.

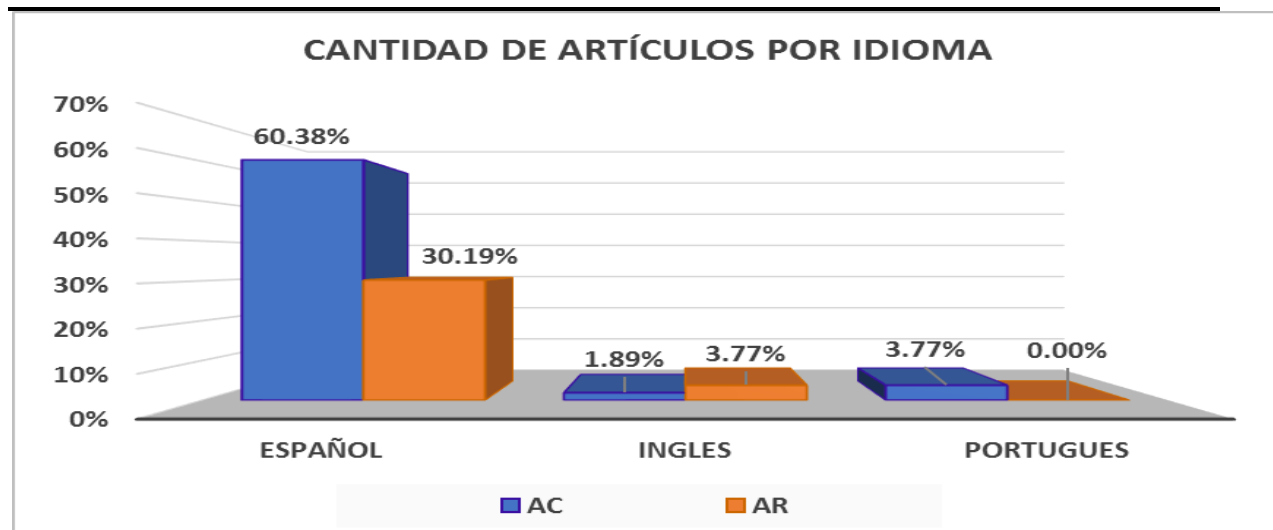


Figure 6. Number of articles by language

The results visible in the table show that of the 53 articles used for the development of this work, 32 correspond to scientific articles, of which 60.38% are in Spanish, 1.89% in English, and 3.77% in Portuguese. As for the systematic review articles, 14 were part of this group, 30.19% in Spanish, 3.77% in English, and 0% in Portuguese. Therefore, this article dealt with information mostly in Spanish.

This chapter includes the presentation of the various findings found through the review:

As a first point, we sought to identify which were the pedagogical competencies that are oriented to teaching performance, taking as a reference the information found in the databases consulted. In view of this, Cádiz, et al., (2012) stated that competencies in general are knowledge that every person requires, which is reflected in the good performance of their functions, therefore, they are all aimed at improving performance. Mainly those mentioned by Villarroel and Bruna (2017), these being the general competencies (such as cognitive, communicative, social, personal, and technological), the specific competencies (such as basic skills to plan and organize sessions, didactic skills, and evaluative skills), and transversal competencies (such as climate management and control). All of them are aimed at improving their performance levels by transforming their practice in favor of their students based on the requirements of the environment (Valle, et al., 2022).

On the other hand, Montalvo, et al., (2022) specified something very important, indicating that digital skills are essential at this time, with ICTs being the most used tools since the arrival of the Pandemic in the country, however from 2019 onwards, the lack of this competence in teachers has had a significant impact on teacher performance.

Regarding the objective that seeks to describe the impact of pedagogical competencies on teacher performance, Galvis (2007) explained that the impact is positive since it allows the teacher to diversify the curriculum according to the needs, achieving potentiating learning in children, therefore, a teacher with pedagogical competencies is a teacher who managed to develop his or her professional competencies. being able to perform effectively and efficiently. Coinciding with the findings of Cádiz, et al., (2012), Villarroel and Bruna (2017) and Valle, et al., (2022).

Regarding the objective that seeks to determine the pedagogical competencies that teachers present, based on the articles consulted, it was possible to determine that Villarroel and Bruna (2017) managed to identify that teachers present general competencies such as cognitive, communicative, social, and personal, however, they discarded technological competencies. Regarding the specific competencies, they identified that the teachers have basic skills to plan and organize their sessions, having a higher qualification from the students in terms of their didactic skills, however, the evaluative skills are discarded. And in terms of transversal competencies, the presence of skills for climate management and control was identified. All of them are aimed at improving their performance levels by transforming their practice in favor of their students based on the requirements of the environment (Valle,

et al., 2022). This is very different from what Marín et al. (2010) found, who pointed out that the most valued competence is the formation of a critical and reflective consciousness.

On the other hand, Pesquero et al. (2008) identified other competencies with better valuation, such as: knowing how to involve families, developing values, mastering certain contents, being able to identify difficulties, encouraging, solving conflicts and, most importantly, having a teaching vocation.

In relation to the objective that seeks to determine which pedagogical competencies teachers lack, Galvis (2007) explained that nowadays, teachers not only need to be based on a paradigm different from the traditional one, but also require an evaluation that allows identifying the attitudinal, cognitive, evaluative and skills elements that are needed to solve the current problem. Faced with this, Chim and Zapata (2022) through their study in Spain stated that this country has the line of research on digital skills with the highest level of development in all of Latin America, however they showed that secondary school teachers have deficiencies in the use of technologies, similar to the case of Mexico where their greatest difficulty is due to the large digital divide it presents. For this reason, they suggested that the state support the use of technologies in education through the implementation of policies, in order to train digital skills in both teachers and students. Miotto, et al., (2022) also identified the same problem in Latin America, and it is necessary to implement educational policies that promote teacher training in the use of technological resources.

Likewise, Villarroel and Bruna (2017) were able to identify that teachers lack technological competencies as part of the general competencies, in terms of specific competencies, they present deficiencies in evaluation, mainly in the development of their instruments and in the innovation of their designs to evaluate. And in terms of transversal competencies, it was identified that teachers lack competencies for reflection and research, making it difficult for them to critically understand the strategies that must be implemented for the development of classes, emphasizing the lack of self-criticism and self-evaluation of strategies.

Cordero (2022), for his part, expressed that teachers during the pandemic process presented social and personal deficiencies as a result of the fact that they had to undergo certain transformations, presenting some discomfort during the process, manifesting certain levels of tension, anguish, and fear for the situation experienced, stress, tiredness, and exhaustion due to the new conditions that led to work overloads; as well as great concern to maintain their performance levels in the face of the deficiencies they presented in terms of digital skills (Cavalcante and Cavalcante, 2022).

CONCLUSION

The results indicated that teachers require the development and reinforcement of competencies that go beyond the simple transmission of knowledge, since they need to make certain adjustments in their profile according to the requirements of today's society. Likewise, it was found that teachers lack digital skills, which is an essential skill today. Therefore, it is suggested that the state provide support through the implementation of policies that encourage the use of technologies in education, in order to train digital skills in both teachers and students.

CONFLICT OF INTEREST.

The authors declare that there is no conflict of interest for the publication of this scientific article.

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