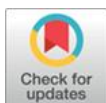


Teacher Training Needs in Preschool Education: survey monitoring



Gisele da Silva Batista^{iD}

Federal University of Rio Grande do Norte, Natal, RN, Brazil

Maria Cristina Leandro de Paiva^{iD}

Federal University of Rio Grande do Norte, Natal, RN, Brazil

Abstract

Identifying training needs is essential to ensure that proposed professional development programs are meaningful and aligned with teachers' real-world experiences. Thus, this Systematic Literature Review, which followed the protocol established by Kitchenham and Charters (2007) and used the Brazilian Digital Library of Theses and Dissertations, the Education Resources Information Center, and the Portal of Journals of the Coordination for the Improvement of Higher Education Personnel as sources, aimed to investigate the training needs of Early Childhood/Preschool teachers. As a result, 942 studies were obtained. Of these, only four studies were directly related to the research topic. The data made it possible to categorize the training needs into the following themes: "Child/Childhood," "Organization of Pedagogical Work," "Axes/Content," and "Toys, Play, and the Ludic." The research made it possible to outline the training needs of Preschool Education teachers, based on the empirical studies available in the literature.

Keywords

training needs; teacher development; Early Childhood Education.

Necessidades de formação dos professores da Pré-Escola: evidências das pesquisas

O levantamento de necessidades formativas é essencial para que as formações propostas sejam significativas e estejam alinhadas com a realidade docente. Dessa forma, esta Revisão Sistemática da Literatura, a qual seguiu o protocolo estabelecido por Kitchenham e Charters (2007) e teve como fonte de informação a Biblioteca Digital Brasileira de Teses e Dissertações, o *Education Resources Information Center* e o Portal de Periódicos da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior, objetivou investigar as necessidades formativas dos professores da Educação Infantil/Pré-Escola. Como resultado, obtiveram-se 942 estudos. Desses, apenas quatro trabalhos estavam diretamente relacionados ao objeto de estudo. Os dados possibilitaram categorizar as necessidades formativas nas temáticas: "Criança/infância", "Organização do Trabalho Pedagógico", "Eixos/Conteúdos" e "Brinquedos, brincadeiras e o lúdico". A investigação possibilitou delinear as necessidades formativas dos professores da Educação Infantil da fase pré-escolar, conforme as pesquisas empíricas disponíveis na literatura.

Palavras-chave

necessidades formativas; formação docente; Educação Infantil.



**Necesidades de formación de docentes de Preescolar:
evidencias de investigaciones****Resumen**

La evaluación de las necesidades formativas es fundamental para que la formación propuesta sea significativa y alineada con la realidad docente. Así, esta Revisión Sistemática de la Literatura, que siguió el protocolo establecido por Kitchenham y Charters (2007) y tuvo como fuente de información la Biblioteca Digital Brasileña de Tesis y Disertaciones, el Centro de Información de Recursos Educativos y el Portal de Revistas Periódicos de la Coordinación para el Perfeccionamiento del Personal de Educación Superior, objetivó investigar las necesidades de formación de docentes de Educación Infantil/Preescolar. Como resultado, se obtuvieron 942 estudios. De ellos, solo cuatro investigaciones estaban directamente relacionadas con el objeto de estudio. Los datos permitieron categorizar las necesidades de formación en temas: “Niño/infancia”, “Organización del Trabajo Pedagógico”, “Ejes/Contenidos” y “Juguetes, juegos y juego”. La investigación permitió perfilar las necesidades de formación de los docentes de Educación Infantil en la fase preescolar, según investigaciones empíricas disponibles en la literatura.

Palabras clave

necesidades de entrenamiento; formación docente; Educación Infantil.

1. Introduction

Early Childhood Education plays a crucial role in the holistic development of children, encompassing social, emotional, cognitive, and physical aspects. With the enactment of Law No. 12,796 on April 4, 2013, Pre-School education became mandatory for children aged 4 to 5 years and 11 months. This law also highlights the importance of both initial and ongoing professional development for educators. As such, it is essential that this early stage of education be conducted with quality, involving dedicated professionals and well-equipped environments to ensure the full development of children.

Ongoing professional development emerges as an essential pillar in this context, involving training activities conducted after initial training, aimed at enhancing knowledge, developing practical skills, and improving pedagogical performance, ultimately leading to better quality in children's education (Rodrigues; Esteves, 1993).

According to Nóvoa (2019), training is a lifelong process, as it is never complete or finished. This understanding highlights the need for teachers to update their knowledge and skills to meet the demands of a constantly changing society. In this way, training can be considered a requirement to ensure quality education, contributing to an educational service that is closely aligned with the needs of students.

In Early Childhood Education, which represents the first stage of Basic Education, teacher training must be intrinsically connected to what is essential: pedagogical practice with children. According to Barbosa (2016), this teaching practice is characterized by being present with the children, relational, not centered on content, and not limited to delivering lessons. Additionally, as pointed out by Drumond (2018), pedagogical practice must be intentionally educational, structuring both time and environment in Early Childhood Education, in order to meet the particularities of children. It is imperative, therefore, to take into account respect for children, educational processes, with a particular focus on the unique characteristics of childhood and approaches that promote the inseparability between care and education.

It is recognized that Early Childhood Education has its own specificities, distinct from Elementary Education. Thus, training programs should consider the actual training needs of this stage, rather than hypothetical ones, which can be identified through gaps, problems, interests, and motivations (Rodrigues; Esteves, 1993). These training programs should be guided by the demands of a constantly changing society.

According to Rodrigues e Esteves (1993, p. 20), “[...] analyzing needs means understanding the interests, expectations, and problems of the target population to ensure the optimal alignment between program – trainer – trainee.” Thus, we can affirm the relevance of having a framework of training needs that express the real demands of each area, stage and educational level, so that training is built with a foundation that supports the desired changes. It is therefore relevant that teachers be encouraged to highlight their own training needs through investigations and critical reflections on their practices, knowledge, contexts, and lived experiences. This will ensure that training programs are meaningful and aligned with what is essential for teachers.

In this context, it was decided to investigate the training needs of Early Childhood Education/Preschool teachers, based on empirical research through a state-of-the-art study. The Systematic Literature Review (SLR) was chosen as the method, since it is a secondary study used to identify, analyze and interpret research already completed on a specific theme, following a well-defined protocol (Kitchenham; charters, 2007).

To achieve the proposed objective, the study was guided by the following research question: “What are the training needs of preschool teachers based on the findings of research available in the literature?”

This article provides an overview of the literature on the training needs of Early Childhood Education teachers. To this end, the article is structured into sections that include the introduction, which contextualizes the study; the methodology, detailing the procedures adopted; the study results, categorized; and the final considerations, which summarize the findings and highlight the identified gaps.

2. Methodology

The study was based on the guidelines proposed by Kitchenham and Charters (2007). Its process included activities that were grouped into three main phases: planning (identification of the need for the SLR and formulation of a research question), conduction (search and selection of primary studies; quality assessment; data extraction; summarization and synthesis of results; and interpretation of results), and reporting (writing the article).

The sources of scientific information used for the search of studies were the Brazilian Digital Library of Theses and Dissertations (BDTD), the Education Resources Information Center (ERIC), and the Journal Portal of the Coordination for the Improvement of Higher Education Personnel (Capes). These databases were chosen for being considered reliable sources for obtaining information and for having a considerable and up-to-date collection of published research results in the field of Education, as well as providing materials for download. To understand the beginning and frequency of studies on the investigated theme, the search in the selected research bases did not include any temporal filter. This means that all available studies were considered, from the oldest to the most recent, without any restriction on the publication period. The searches were conducted between September 2022 and January 2023.

The search string was developed with the terms to be searched, considering the main objective and the formulated research question. The survey was conducted in (inter)national scientific information sources. For national sources, the following search string was used: “*necessidade* formativa**” OR “*necessidade* formativa* de professor**” OR “*necessidade* de formação docente*” OR “*necessidade* de formação de professores*” AND “*Educação Infantil*” OR “*Educação Pré-Escolar*” OR “*educação da infância*” OR “*jardim de infância*”. For the international source, the search string was: “training needs” OR “teachers’ training needs” AND “Childhood Education” OR “early childhood education”.

Considering the structured search *string*, it was essential to delimit the inclusion and exclusion criteria of the studies that were searched, in order to identify those that had direct evidence with the research question and to minimize the probability of bias (Kitchenham; charters, 2007). Thus, the following inclusion criteria were listed: empirical research investigating the training needs of preschool teachers; articles, theses and dissertations; publications in Portuguese and English; peer-reviewed works; and without time frame. Exclusion criteria: studies not available in full; duplicate studies; and secondary studies.

2.1 Analysis of results and discussions

As a procedure, the title and abstract were initially read in order to filter the studies that were aligned with the objective and research question. In the second stage, a full reading of the selected studies was carried out, allowing for a more detailed evaluation, ensuring that only the studies meeting the criteria were included in the review. This method helped optimize the selection process, ensuring that only relevant studies were considered.

A spreadsheet was created to extract and organize the data from the retrieved articles, theses, and dissertations. The spreadsheet allowed for the structured recording of the main information of each study, facilitating the analysis and synthesis of the results. The recorded information included: website, title, author, keywords, year, methodology, document type, general objective, theoretical framework, and results.

The searches conducted in the scientific information sources resulted in 942 studies, with 865 from ERIC, 43 from BDTD, and 34 from the Capes Journals. By analyzing the titles and abstracts of the retrieved studies, it was identified that many did not meet the established inclusion criteria, mainly because they investigated the training needs of daycare teachers, coordinators and directors of Early Childhood Education, elementary school teachers, were unrelated to the study's object, or did not address the investigation of training needs.

The application of the inclusion and exclusion criteria resulted in the selection of four documents, one from Capes and three from BDTD. No study retrieved from the ERIC database met the criteria of this research.

The works included correspond to the following types of documents: two dissertations, a thesis and an article, which will be mentioned in this article by their authors:

Pimenta (2007), Campos (2012), Campos (2017) and Feldmann et al. (2022), respectively, as shown in Table 1.

Table 1 – Selected studies

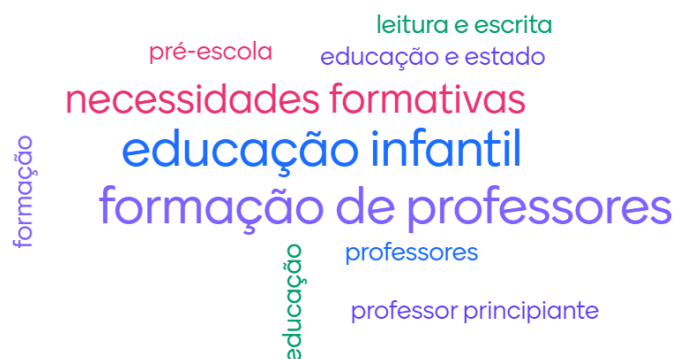
Information source	Author / Year	Document type	Research Title
BDTD	Pimenta (2007)	Dissertation	Training needs and continuous professional development strategies for teachers: observation and analysis of a teacher training program.
BDTD	Campos (2012)	Dissertation	Training needs of beginner teachers in Early Childhood Education/Preschool.
BDTD	Campos (2017)	Doctoral thesis	From the needs of teacher training to the continuous training of Early Childhood Education teachers
Capes	(2022)	Article	Teacher and coordinator training in Early Childhood Education: an experience based on their training needs.

Source: Research data (2023).

Considering that no time frame was established, the studies analyzed cover a period of 15 years, from 2007 to 2022. It is interesting to note that there was no year with a significantly higher number of publications, as the number of selected studies was small. This low number of studies may indicate the need for greater attention from researchers regarding the training needs of preschool teachers, for a better understanding and development of training programs aimed at educators in this stage of education.

Based on the selected studies, a word cloud was created using the keywords from the research, as shown in Figure 1.

Figure 1 – Keywords



Source: Mentimeter – Adapted by the authors (2023).

The keywords highlighted in the word cloud – “Early Childhood Education,” “teacher training,” and “training needs” – are aligned with the objective of the study, which is to investigate the training needs of Early Childhood Education teachers. These keywords directly reflect the central theme of the research, indicating that the obtained results are in line with the study's purpose. This strengthens the relevance and pertinence of the findings for the context of Early Childhood Education and teacher training.

2.2 Methodologies used in the research.

The selected studies needed to consist of empirical research, including those categorized as field research, which involve experiments or observations of a specific context to construct the data. Therefore, the importance of identifying the methodologies used in the selected studies was recognized, as they are considered crucial elements for understanding the processes followed in the research to identify training needs. In this sense, before addressing the identification of the training needs of preschool teachers indicated by the studies, the instruments used to obtain the data will be presented.

To compile data on the training needs of teachers, Pimenta's (2007) study used a questionnaire. This was applied at the end of the meetings with teachers who participated in a literacy training program and taught children from 6 years of Elementary School and the last level of Early Childhood Education. In addition to data collection through questionnaires, teachers also provided reports, and researchers made observations during the training program. The investigation aimed to identify indicators of training needs. These indicators are derived from the teachers' interactions with the children and the emerging training strategies during the development of the program. This was done to meet both the needs of the teachers and the objectives of the ongoing training program.

The research conducted by Campos (2012) employed semi-structured interviews, which were audio-recorded and later transcribed. These interviews were designed and conducted individually, following an initial sequence of questions, with the possibility of adding additional questions during the process to clarify or deepen responses as needed.

In Campos' (2017) study, various instruments were used to collect data. This included a questionnaire, a semi-structured interview conducted with four preschool teachers and two coordinators, as well as participant observation in two level 3 classes and

two level 4 classes. The questionnaire was applied at the beginning of the research to characterize the teachers involved in the study.

The study conducted by Feldmann et al. (2022) investigated the training needs through three reflective meetings with 56 teachers, six early childhood education coordinators, and one pedagogical supervisor. During these meetings, the teachers had the opportunity to revisit their experiences in education as professionals, reflect on their teaching practices, and identify possible topics that required further study. These moments were characterized by fostering attitudes of listening, self-assessment, and re-signification of practice. During the meetings, questions were raised to identify the themes to be discussed, providing the teachers with moments of identification, analysis, and reflection on their needs and aspirations. Based on these reflections, a training proposal was developed, which included the discussion of the themes identified with the collaboration of these professionals.

There is a variety of instruments and methodologies that can be employed in data collection to investigate these needs. These include, for example, reflective meetings, questionnaires, teachers' reports, observations of teaching practices, participant observation, and semi-structured interviews. In this regard, Rodrigues and Esteves (1993) emphasize the importance of rigorously explaining the procedures used, as well as having a clear understanding of the concept of need underlying the study.

2.3 Training needs of Early Childhood/Preschool teachers: what the research says

This section aims to present the training needs of Early Childhood Education teachers in the preschool phase, based on the results of the studies presented. From the findings, a table was created with the studies and their respective needs.

Table 2 – Training needs according to the results of the studies.

(continues)

Training needs of Early Childhood Education - Pre-School teachers.			
Pimenta (2007)	Campos (2012)	Campos (2017)	(2022)
1. Child development	1. Ethics in teaching children	1. Planning	1. Early Childhood Education: Starting Our Reflections
2. Pedagogical intervention	2. Child/ Childhoods	2. Oral language, reading and writing	2. Welcoming children and teachers during and after

			the pandemic
3. Groupings	3. Specificities of teaching/learning in Preschool	3. Mathematical language	3. The BNCC and its reference for Early Childhood Education
4. Didactic transposition	4. Toys and games	4. Children's thinking	4. The Ludic in Early Childhood Education: Pedagogical Practices
5. Planning	5. Legal determinations regarding Early Childhood Education	5. Multiple languages/expressions	5. What will Early Childhood Education look like post-pandemic
6. Organization of content	6. Multiple languages and expressions in early childhood education	6. Individualized support for the child	6. Storytelling
7. Special educational needs:	7. Specific content of the areas of knowledge	7. Support for children with special needs	7. Time and space in Early Childhood Education
8. Curricular reorganization	8. Didactic planning	8. Family-school relationship	8. Childhoods and learning contexts
9. Indiscipline	9. Avaliação e suas especificidades na Educação Infantil/ Preschool	9. Rules and boundaries	9. Phonological awareness in Early Childhood Education
10. Class management		10. Teacher training	10. Hybrid and remote learning in Early Childhood Education
11. Educational projects		11. Space in Early Childhood Education	11. Multi-grade classes in Early Childhood Education
12. Methodologies/ Strategies for literacy		12. Scarcity of materials	12. Assessment in Early Childhood Education
13. Arts			
14. Math			
15. Music			
16. Science			
17. Pedagogical practices			
18. Pedagogical Projects			
19. Assessment and documentation			
20. Games			
21. Space structuring			

Source: Research data (2023).

Given the data collected, it is possible to observe that some needs are common among the researches. Based on this, a second table was created, cross-referencing the needs through an approximation categorization.

Table 3 – Categories of needs

Categoria	Subcategory	Pimenta (2007)	Campos (2012)	Campos (2017)	Feldmann et al. (2022)
Child/ Childhood		1. Child development 7. Special educational needs 9. Indiscipline	1. Ethics in teaching children 2. Child/ Childhoods	4. Children's thinking 7. Support for children with special needs 9. Rules and boundaries	8. Childhoods and learning contexts
Organization of pedagogical work	Planning	2. Pedagogical intervention 3. Grouping; 4. Didactic transposition 5. Planning 11. Educational projects 17. Pedagogical practices 8. Pedagogical projects	3. Specificities of teaching/ learning in Preschool 8. Didactic planning	1. Planning 6. Individualized support for the child 12. Scarcity of materials	6. Storytelling 11. Multigrade classes in Early Childhood Education
	Assessment	19. Assessment and documentation	9. Assessment and its specificities in Early Childhood Education/ Preschool	-	12. Assessment in Early Childhood Education
	Space and time in Early Childhood Education	21. Space structuring		11. The space in Early Childhood Education	7. Time and Space in Early Childhood Education
Axes/Content		6. Organization of content 8. Curricular reorganization 13. Arts 14. Math 15. Music 16. Science	6. Multiple languages and expressions in early childhood education 7. Specific content of the areas of knowledge	2. Oral language, reading, and writing 5. Multiple languages/ expressions 3. Mathematical language	3. The BNCC and its reference for Early Childhood Education 9. Phonological awareness in Early Childhood Education
Toys, games, and the Ludic		20. Games	4. Toys and Games	-	4. The Ludic in Early Childhood Education: Pedagogical Practices

Source: Research data (2023).

There are three categories that stand out due to their recurrence across all the studies: "Child/Childhood," "Organization of Pedagogical Work," and "Axes/Content." Additionally, other training needs were identified in some studies, but not all, such as "Toys, games, and the Ludic," which appeared in three studies, highlighting the relevance and importance of these themes for the training of Early Childhood Education teachers. This is particularly evident as these themes have been identified across different groups of teachers over a 15-year period, starting from the initial year of the studies presented here.

The category "Child/Childhood" addresses aspects related to the specificities, uniqueness, and diversity of children, based on themes such as: Child development, Childhoods, Children's thinking, Learning contexts, Inclusion, rules, and boundaries. This finding highlights the urgency of understanding the child in their entirety, as someone who thinks and develops in relation to others, through language, in a mediated process. These concepts are essential for teaching practices aligned with the objectives of this educational stage, as they allow for the development of pedagogical plans that consider the specific needs of children.

As Perrotti (1990, p. 12, apud Franco, 2002, p. 30) emphasizes, "[...] the child is not a mere organism in change, it is not just a quantity of years, an age datum, but something much more complex and complete." In this sense, childhood, as an invention of modernity, also carries a historical and variable meaning across different societies. Therefore, the meaning of childhood and the child is subject to changes over time and space, and it is necessary to consider the contexts in which people are embedded (Ariès, 1986). Thus, it is inappropriate to assume the existence of a homogeneous childhood, as historical processes demonstrate a heterogeneous child population with unequal socialization processes (Franco, 2002).

In this perspective, Kramer (2007) emphasizes that Brazil experiences a diversity of social, cultural, and political aspects, being shaped and marked by Indigenous nations, slavery, oppression, poverty among a large part of the population, as well as colonialism and imperialism, which left their marks on socialization. Therefore, a homogeneous conception of childhood does not encompass the plurality of realities lived by the Brazilian child population.

As Kramer (2007) points out, the child is not just a phase, a stage to reach adulthood; their specificity encompasses imagination, fantasy, creation, and play, which characterize them; it is where their uniqueness resides. Children are citizens, they have rights, they play, produce culture, and are produced by it. Understanding children in this way helps one see the world from their point of view. As outlined in the National Curricular Guidelines for Early Childhood Education (DCNEI, 2009), the child is a:

[...] a historical subject and a subject of rights who, in the interactions, relationships, and everyday practices they experience, builds their personal and collective identity, plays, imagines, fantasizes, desires, learns, observes, experiments, narrates, questions, and creates meanings about nature and society, producing culture.

Given the complexity and breadth of the concept of childhood and children, the importance of this theme in the ongoing professional development of Early Childhood Education teachers becomes evident. It is essential, therefore, to understand the subtleties and singularities of the child in order to provide enriching and meaningful educational experiences, promoting education that is sensitive to their particularities in each context and era. This means understanding the enchantment of a child's world, which is different from that of adults, one that is interested in toys and dolls, attracted to fairy tales, myths, and legends, eager to learn and create (Kramer, 2007).

A discussion about childhood and children must necessarily consider the ways of life of the child population and the impacts of social inequalities and public policies, which often disregard their particularities and needs. When children's rights are restricted, whether due to a lack of access to basic services such as education, health, and leisure, or the absence of policies that promote equity, it compromises their full development and the appreciation of their cultural and social diversity.

A category organized from the themes indicated in the studies concerns the "Organization of Pedagogical Work," which includes foundational formative needs such as planning and assessment, as well as the perspective of organizing space and time. This highlights the importance given to teaching practices that arise from a pedagogical intervention, comprising processes that involve various aspects of teaching practice, from the initial stages of planning to the moment of assessment, covering key elements for and of practice, such as materials, resources, time, and space. It is about thinking the educational

act in the context of early childhood education, encompassing the flavors and aromas of a Ludic, creative environment that stimulates and promotes the children's overall development.

The starting point of this organization, based on the conceptions that underpin the practice, is planning, which, according to Campos (2012), is a decision-making process that directs actions towards achieving objectives. In this sense, it organizes ideas, establishes methods and resources, and sets deadlines. Therefore, when planning, decisions are made in advance regarding when, how, and what to do.

In the context of planning, there is a need to consider an evaluative model that caters to the child audience, as opposed to reductionist approaches that emphasize verification and standardized measurements. In Early Childhood Education, according to Article 31 of the National Education Guidelines and Framework Law (LDBEN), evaluation should occur through the monitoring and recording of children's development, without the aim of promotion, even for access to Elementary Education (Brazil, 1996). In this perspective, without the objective of selection, promotion, or classification, as pointed out by the DCNEI (Brazil, 2009).

In addition to understanding the monitoring of children's development, evaluation encompasses a crucial process for teachers to reflect on the planning and adaptations their pedagogical activities may require. Therefore, it is of utmost importance that teacher training programs address the specificities and significance of planning and evaluation at this educational stage.

In this organizational context, the research highlighted the need to address "Space and Time in Early Childhood Education." In this regard, the studies proposed themes such as "Space Structuring," "Space in Early Childhood Education," and "Time and Space in Early Childhood Education." These topics underscore the importance of considering the organization of space as an educational environment. As noted by Barbosa and Horn (2001), the physical space is essential for children's development, as it contributes to the structuring of motor, sensory, symbolic, playful, and relational functions.

Thus, when thinking about the space for children, it is necessary to consider that the environment is composed of "[...] taste, touch, sounds and words, rules for the use of space, lights and colors, odors, furniture, equipment, and rhythms of life" (Barbosa; Horn, 2001, p. 73). According to Freitas (2007), it is in the particularity of the daily construction of space, time, organization, and practices those activities with children acquire specific

characteristics. Therefore, participating in training programs that address the importance and possibilities of organizing spaces and time is essential, as a well-planned space is crucial for children's development, stimulating their interactions and the construction of various learnings.

Another point raised by the teachers investigated was the need for further exploration of some aspects that we categorized as "Axes/Content." This category encompasses aspects related to the knowledge and understanding required for the didactic organization of content, which we termed "Axes/Content" due to the identification of themes related to: "Organization of content," "Arts," "Math," "Music," "Science," "Multiple languages and expressions in early childhood education," "Specific content in knowledge areas," "Oral language, reading, and writing," "Multiple languages," "Mathematical language," and "Storytelling."

The highlighted aspects draw attention to the gap between what the DCNEI propose and guide and what these studies indicate, considering that Early Childhood Education is not organized, in terms of curriculum, by areas of knowledge. There are significant differences in the curriculum organization by Content/Axis and by fields of experience. According to the DCNEI, the curricular proposal consists of practices aimed at integrating the practices and experiences provided to children, without losing sight of their knowledge and "[...] the knowledge that is part of the cultural, artistic, environmental, scientific, and technological heritage, in order to promote the integral development of children from 0 to 5 years old" (Brazil, 2009).

The Common Nacional Curricular Base (BNCC), which guides the curriculum for this stage, is organized into fields of experience defined as "[...] a curricular arrangement that embraces the situations and concrete experiences of children's daily lives and their knowledge, intertwining them with the knowledge that is part of cultural heritage" (Brazil, 2017, p. 40). Therefore, it is important to emphasize that the definition of these fields is based on the fundamental knowledge to be provided to children, connected to their experiences, as stated in the DCNEI. They are constituted by the learning and development rights: living together, playing, participating, exploring, expressing, and understanding oneself, organized into five fields: The self, others, and us; body, gestures, and movements; traces, sounds, colors, and shapes; listening, speaking, thinking, and imagining; spaces,

times, quantities, relationships, and transformations, in which the learning and development objectives for children are defined.

Given this need, it is essential to recognize and establish a coherent conception regarding the knowledge worked on in this educational stage, which is not based on contents, as in Elementary Education, but on fields of experience, where interactions and play are the structuring axes. In this sense, Faria (2011, p. 14) points out that:

Without the traditional classroom and school content, teaching in nurseries and preschools organizes itself in another way, another pedagogy (different from elementary education), suitable for the contents of cultural practices and knowledge derived from social movements engaged in social transformation, attentive to children's experiences and the age-specific characteristics found in the collective.

Therefore, it's crucial for training programs to recognize and promote an understanding of what is unique in Early Childhood Education, offering experiences that encompass interactions, play, imagination, creativity, discoveries, production, and many other opportunities that characterize this phase. Additionally, it is emphasized that training programs should provide both practical and theoretical reflections on pedagogical proposals, considering different organizational and curricular possibilities that are appropriate for this stage of development.

In conclusion, the notes on "Toys, Play, and the Ludic" are presented. This topic aligns closely with the fundamental principles of pedagogical practices in Early Childhood Education: interactions and play. Essentially, it brings into the educational space the perspective that children learn and develop through playing, in their relationships with others and with objects, by experimenting, exchanging, and experiencing language. As Kishimoto (2010, p. 1) asserts:

Play is the main activity in a child's daily life: It is important because it gives the child the power to make decisions, express feelings and values, understand themselves, others, and the world, repeat pleasurable actions, share, and express their individuality and identity through different languages. It allows the child to use their body, senses, and movements to solve problems and create. Through playing, the child experiences the power to explore the world of objects, people, nature, and culture, to understand and express it through various languages. However, it is in the realm of imagination that play stands out by mobilizing meanings.

It is evident that the play involves the characteristics of what it means to be a child (Kramer, 2007). Additionally, according to Maluf (2008), Ludical activities provide much more than just fun; they are considered important pedagogical tools for the learning

process. They must, therefore, be constitutive of teaching and training practice. Through playing and ludical activities, children can express themselves, learn, and develop, offering a range of benefits that go beyond mere entertainment.

Thus, participating in training programs that address these aspects, considering both theory and practice, will provide educators with an understanding of how to incorporate them into the classroom. This will help create a ludic learning environment rich in meaningful experiences, promoting the holistic development of children.

The study by Feldmann et al. (2022) highlighted needs that were less aligned with those found in another research. It presents, in its findings, demands that are consequences of the Covid-19 pandemic. According to the study, teachers expressed the need to improve their skills in areas such as "Welcoming children and teachers during and after the pandemic," "What Early Childhood Education will look like post-pandemic," and "Hybrid and remote learning in Early Childhood Education."

The Covid-19 pandemic brought numerous changes to the daily life of society, due to sanitary and social distancing measures. One of the most affected sectors was education, given that in-person activities were suspended and replaced by remote learning, triggering reflections, anxieties, and questions. These changes had to occur quickly, and teachers needed to adapt their lessons through the use of Information and Communication Digital Technologies (ICT), often without specific pedagogical training on how to use these tools. This situation required the education sector to adapt technologically to the new reality.

It is clear that the adaptation of children in Early Childhood Education is a complex process, as it emotionally demands a lot from them. Thus, the insertion and adaptation of children into the Early Childhood Education institution is a sensitive moment, and facing the return or first-time arrival of children in these environments during and after the social isolation caused by the pandemic became even more complicated. This scenario was challenging for all children, both those born during the pandemic, who did not have the opportunity to interact with others, and those who already had a school routine and had to distance themselves.

This group was forced to remain in social isolation, which significantly affected their social relationships. According to Oliveira (2018), the families of the children can contribute to the adaptation process by participating in activities that help the children feel safe and

calm in this new context. In this sense, the teacher needs to prepare to welcome both the child and their family, as addressing the insecurities, anxieties, and fears of the family will greatly assist in the children's adaptation.

The experience of educating during the pandemic highlighted the knowledge, skills, and practices that many teachers did not yet possess, requiring them to develop formative capacities they previously lacked, thus fulfilling the educational needs demanded by the historical moment. According to Rodrigues and Esteves (1993), needs emerge in specific historical and social contexts and are influenced by factors external to the individual, and can either be shared by several people or manifest as individual needs.

These factors highlight the importance of teacher education as a continuous process of professional development, beginning with school experience and extending throughout life (Imbernón, 2001). This perspective is based on the principle of the incompleteness of the self, meaning that no teacher is a fully complete professional. This highlights the importance of continuous professional development, enabling educators to provide quality education that aligns with the realities and needs of today's children.

In this context, it is essential to emphasize that teacher training policies alone do not encompass the complexity of the teaching profession. This is largely due to the poor working conditions faced by teachers, which include inadequate infrastructure, excessive working hours, and a lack of pedagogical resources. Furthermore, the lack of recognition and social appreciation of the teaching profession exacerbates the challenges, demotivating professionals and compromising the quality of practice. Therefore, it is necessary for teacher training policies to be linked with initiatives that ensure better working conditions, promote the valorization of the career, and foster social recognition of the fundamental role played by educators.

3. Final Considerations

The SLR presented allowed us to outline some training needs of preschool kindergarten teachers, according to the empirical research carried out. The common needs identified across the research include aspects such as: "Child/Childhood," "Organization of pedagogical work," "Axes/Content," and "Toys, play, and the Ludic."

In light of the identified training needs, it is observed that all studies address important aspects of pedagogical practices, such as concepts of children and childhood,

the similarities in proposals that consider the play, the ludic, the organization of spaces and times, the axes and content that structure teaching work, with planning and assessment guiding pedagogical actions. What stands out is that studies on Early Childhood Education still focus on content, axes, and knowledge areas, even after the publication of the DCNEI in 2010. This prompts reflection on the need to broaden the scope to include the fields of experience and the rights to learning, which are essential for curricular organization and teaching practice as indicated by the DCNEI.

Although three major databases (BDTD, ERIC, and *Periódicos da Capes*) were used, the restriction to these sources indicates a narrowing of the study, opening up possibilities for research not covered within the scope of this investigation. Additionally, the limited number of studies that met the inclusion and exclusion criteria (four out of a total of 942) suggests that the field still lacks investigations, and the indicated needs do not encompass the full range of knowledge required for teaching in Early Childhood Education. Furthermore, needs arise continuously and due to various factors, as can be seen in the technological needs, especially in light of the demands brought on by the Covid-19 pandemic (Feldmann et al., 2022).

Therefore, investigating the training needs of teachers is crucial to ensure that the training offered meets their pedagogical demands, while also considering the real context in which they operate. This facilitates greater interest and involvement, thereby qualifying the process and, consequently, providing an education that aligns with the singularities and specificities of children.

4. References

ARIÈS, P. *História social da criança e da família*. 2. ed. Rio de Janeiro: Guanabara, 1986.

BARBOSA, M. C. S. Três notas sobre formação inicial e docência na Educação Infantil. In: CANCIAN, V. A.; GALLINA, S. F. S, WESCHENFELDER, N. (org.). *Pedagogias das infâncias, crianças e docências na Educação Infantil*. Brasília, DF: Ministério da Educação, 2016. p. 131-139.

BARBOSA, M. C. S.; HORN, M. G. S. Organização do espaço e do tempo na Educação Infantil. In: CRAIDY, C. M.; KAERCHER, G. E. P. S. *Educação infantil: pra que te quero?* Porto Alegre: Artmed, 2001. p. 67-79.

BRASIL. *Base Nacional Comum Curricular*. Brasília: Ministério da Educação, 2017.

BRASIL. *Diretrizes Curriculares Nacionais para a Educação Infantil*. Brasília: Ministério da Educação, 2009.

BRASIL. Lei nº 9.394/96, de 20 de dezembro de 1996. Estabelece as Diretrizes e Bases da Educação Nacional. *Diário Oficial [da] República Federativa do Brasil*, Poder Executivo, Brasília, DF, 21 dez. 1996.

BRASIL. Lei nº 12.796, de 4 de abril de 2013. Altera a Lei nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional, para dispor sobre a formação dos profissionais da educação e dar outras providências. *Diário Oficial [da] República Federativa do Brasil*, Poder Executivo, Brasília, DF, 5 abr. 2013.

CAMPOS, R. R. *Das necessidades de formação docente à formação contínua de professores da Educação Infantil*. 2017. Tese (Doutorado em Educação) – Programa de Pós-Graduação em Educação, Universidade Federal do Rio Grande do Norte, Natal, 2017. Available at: <https://repositorio.ufrn.br/handle/123456789/27374>. Accessed on: 28 jan. 2023.

CAMPOS, R. R. *Necessidades de formação de professoras principiantes da Educação Infantil/Pré-Escola*. 2012. Dissertação (Mestrado em Educação) – Programa de Pós-Graduação em Educação, Universidade Federal do Rio Grande do Norte, Natal, 2012. Available at: <https://repositorio.ufrn.br/handle/123456789/14522>. Accessed on: 28 jan. 2024.

DRUMOND, V. Formação de professoras e professores de educação infantil: por uma pedagogia da infância. *Zero-a-Seis*, Florianópolis, v. 20, n. 38, p. 288-302, 2018. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=7006012> Accessed on: 28 jan. 2024.

FARIA, A. L. G. Apresentação. In: GEPEDISC (org.). *Culturas infantis em creches e pré-escolas: estágio e pesquisa*. Campinas: Autores Associados, 2011. p. 13-17.

FRANCO, M. E. W. *Compreendendo a infância*. Porto Alegre: Mediação, 2002.

FREITAS, M. C. Prefácio: o coletivo infantil: o sentido da forma. In: FARIA, A. L. G. (org.). *O coletivo infantil em creches e pré-escolas: falares e saberes*. São Paulo: Cortez, 2007. p. 7-13.

FELDMAN, M. G.; MIRANDA, H. P.; SANTOS, C. P.; PEREIRA, A. L. N. Formação de professores e coordenadores da Educação Infantil: uma experiência a partir de suas necessidades formativas. *Revista e-Curriculum*, São Paulo, v. 20, n. 3, p. 1243-1262, 2022. Available at: http://educa.fcc.org.br/scielo.php?pid=S1809-38762022000301243&script=sci_arttext Accessed on: 28 jan. 2024.

IMBERNÓN, F. *Formação docente e profissional: formar-se para a mudança e a incerteza*. São Paulo: Cortez, 2001.

KISHIMOTO, T. M. Brinquedos e brincadeiras na educação infantil. In: SEMINÁRIO NACIONAL: CURRÍCULO EM MOVIMENTO – PERSPECTIVAS ATUAIS, 1., 2010, Belo Horizonte. *Anais* [...]. Belo Horizonte: MEC, 2010. p. 1-20. Available at: <http://portal.mec.gov.br/docman/dezembro-2010-pdf/7155-2-3-brinquedos-brincadeiras-tizuko-morchida/file>. Accessed on: 22 mar. 2024.

KITCHENHAM, B.; CHARTERS, S. *Guidelines for performing systematic literature reviews in software engineering*. Technical Report - Keele University, Staffordshire, 2007. Available at: https://www.elsevier.com/_data/promis_misc/525444systematicreviewsguide.pdf. Accessed on: 9 set. 2024.

KRAMER, S. A infância e sua singularidade. In: BEAUCHAMP, J.; PAGEL, S. D.; NASCIMENTO, A. R. (org.). *Ensino Fundamental de nove anos: orientações para a inclusão da criança de seis anos de idade*. Brasília, DF: Ministério da Educação, 2007. p. 13-23.

MALUF, A. C. M. *Atividades lúdicas para Educação Infantil: conceitos, orientações e práticas*. Rio de Janeiro: Vozes, 2008.

NÓVOA, A. Os professores e a sua formação num tempo de metamorfose da escola. *Educação & Realidade*, Porto Alegre, v. 44, n. 3, p. 1-15, 2019. Available at: <https://www.scielo.br/j/edreal/a/DfM3JL685vPJryp4BSqyPZt/?lang=pt> Accessed on: 22 mar. 2024.

OLIVEIRA, S. C. M. *O processo de adaptação das crianças na educação infantil: os desafios das famílias e dos educadores da infância*. 2018. Tese (Doutorado em Educação) – Programa de Pós-Graduação em Educação, Universidade Estadual Paulista Júlio de Mesquita Filho, Presidente Prudente, 2018. Available at: <http://hdl.handle.net/11449/153912>. Accessed on: 22 mar. 2024.

PIMENTA, J. I. P. B. *Necessidades formativas e estratégias de formação contínua de professores: observação e análise de um programa de formação de professores*. 2007. Dissertação (Mestrado em Educação) – Programa de Pós-Graduação em Educação, Universidade Estadual Paulista, Araraquara, 2007. Available at: <https://repositorio.unesp.br/items/39daf6ee-0946-45a9-8dcd-9c36bfcc3d70>. Accessed on: 28 jan. 2023.

RODRIGUES, A.; ESTEVES, M. *A análise de necessidades na formação de professores*. Porto: Porto, 1993.

Gisele da Silva Batista, Federal University of Rio Grande do Norte (UFRN), Postgraduate Program in Innovation in Educational Technologies (PPgITE)

 <https://orcid.org/0000-0002-4220-0372>

Master's degree from the PPgITE program at UFRN and a graduate in Pedagogy from UFRN.

Author's contribution: Project management, formal analysis, conceptualization, data curation, writing – first draft, writing – revision, research, methodology, resources, validation, and visualization.

Lattes: <http://lattes.cnpq.br/4875433374610461>

E-mail: giselebatistasil@gmail.com

Maria Cristina Leandro de Paiva, Federal University of Rio Grande do Norte (UFRN), Graduate Program in Innovation in Educational Technologies (PPgITE), Graduate Program in Education (PPGEEd)

 <https://orcid.org/0000-0002-5811-804X>

Professor at UFRN, working in undergraduate programs, PPgITE, and PPGEEd. Holds a degree in Pedagogy, as well as a Master's and Ph.D. in Education from UFRN.

Author's contribution: Formal analysis, conceptualization, writing – revision and editing –, methodology, resources, supervision, validation, and visualization.

Lattes: <http://lattes.cnpq.br/5008583007971704>

Email: cristina.leandro@ufrn.br

Editora responsável: Lia Machado Fiuza Fialho

Ad hoc reviewers: Valdete Coco and Janice Débora de Alencar Batista Araújo

Translated by: Thiago Alves Moreira

How to cite this article (ABNT):

BATISTA, Gisele da Silva; PAIVA, Maria Cristina Leandro de. Necessidades de formação dos professores da Pré-Escola: evidências das pesquisas. *Educação & Formação*, Fortaleza, v. 9, e13619, 2024. Available at:

<https://revistas.uece.br/index.php/redufor/article/view/e13619>



Received on July 17th, 2024.

Accepted on November 14th, 2024.

Published on December 11th, 2024.