

Early Childhood Educators, Their Professional Recognition, Training and the Challenges They Face in Today's World.

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Abstract

The professional recognition of early childhood educators has evolved to a comprehensive level, encompassing pedagogical and specific aspects of teaching. From welfare models to advanced approaches such as Maria Montessori's, the importance of specialized training and the evolution of early childhood education in the 20th century is highlighted. The training of early childhood educators has evolved over time in response to social and historical expectations, adapting to different models, approaches and practices. Today, the professionalization of early childhood education requires higher levels of training, reflecting the growing importance of early childhood education. Universities and programs need to adapt to the current changes with three key trends Adopting educational models that reflect emerging economies Increasing transnational education and internationalization. Prioritizing online education to meet modern demands, promoting hybrid and collaborative models that prepare professionals for new realities.

This article offers a reflection on early childhood educators, their training, professional recognition, and the difficulties they encounter in the modern society. Early childhood educators play a critical part in children's development today, which emphasizes the value of their professional recognition and ongoing training. The study highlights the necessity for universities and other higher education establishments to adjust to new developments, such international online learning, to adequately train future educators. The goal is to provide them with thorough training that enables them to adjust to the various cultural shifts that occur throughout history, promoting creativity and the use of educational technology to meet the demands of the global labor market and guarantee ongoing professional development.

Keywords: Early childhood educators, professional recognition, professional training.

Introduction

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In a comparable manner to the historical understanding of early childhood education, it is of great importance to recognize the ways in which the pedagogical approaches, institutional references and specialized knowledge of early childhood educators have been affected by the processes which established an ideological background towards modernity. These procedures have defined their social and professional recognition, which has gradually given rise to a variety of interpretations and perspectives. When discussing early childhood education, it is important to examine how the concept of childhood has evolved as a unique stage separate from adulthood. Moreover, it is essential to study how the contemporary school has evolved to achieve the modern state's goal of a more civilized society.

The concept of childhood is culturally and ideologically diverse, and therefore, the understanding of childhood as an object of educational action in pedagogy is also particularized. Scholars have mapped out a chain of intellectual development that starts with Rousseau, progresses through Pestalozzi and Fröebel (the latter hailed as the pioneer of kindergartens), and reaches its apex in the theories of Decroly and, particularly, Montessori. Montessori (1982) suggests that the 20th century is the era when childhood was discovered, a historical occurrence that has been neglected.

Ideas regarding the teacher's role in society, their preparation, and their place in the field of early childhood education emerged alongside the development of pedagogical thought. It is evident that the social issue that arose during the Industrial Revolution is closely linked to the origins of concern for children's education, both socially and historically.

The first early childhood educational institutions in England were established during the early 19th century, as stated by the Virtual Museum of the History of Education (2022). These institutions, established in the early 19th century, had the goal of educating urban children from poor and working-class families, following a specific method or system. Both charitable and reformist motives drove this system. In the beginning of the Industrial Revolution, there was a practice of involving women and children in industrial labor, and schools were seen as a tool to instill social values and prevent delinquency. A variety of names would subsequently know this inaugural institutional type of early childhood school, including infant schools in the United Kingdom, salles d'asile in France, Asili infantili in Italy, párvulos in Spain, and kleikinderschule okleikinderbewahranstalt in Germany.

In this context, women gradually defined the roles, responsibilities, and expertise associated with childhood education, occupying a prominent position. This led to the creation of opportunities for their integration into the labor market, gradually challenging the traditional confinement of women to the domestic sphere. Saenz Del Castillo et al. (2018) suggests that women found marriage to be a means of survival, and that the education of their children was a further reason for them to abandon their professional careers and their work, which became secondary.

Consequently, society attributed the capacity to assume the care and education of their children to women, who repressed their impulses and provided a model of civilized behavior. Society marginalized the father figure and widely accepted that the primary responsibility of the father was to ensure the financial well-being of the family. Saenz Del Castillo et al. (2018) highlights that this conceptualization of women also had a significant impact on the development of the educational system during the eighteenth, and nineteenth centuries. The promotion of these qualities led to a rise in school enrollment over the centuries. The presence of a female teacher was mandatory in this public space to ensure the education of other people's children.

The understanding of children and their learning that cognitive psychology and other academic fields provide will enable early childhood educators to approach their work from new perspectives and with greater complexity. Consequently, in response to cultural and historical expectations, early childhood educator preparation has evolved over time, encompassing a variety of models, approaches, and methods. As early childhood education gets more professionalized, more training is needed because it is becoming an increasingly essential field. The role of teachers, and particularly those who specialize in working with children, is of great significance and entails a considerable degree of responsibility. This is because this stage of life is characterized by a heightened level of care and learning, with a substantial proportion of the total learning capacity of human beings occurring during this period, Jimenez et al. (2023).

This article presents a reflection on early childhood educators, their professional recognition, training and the challenges they face in today's world. Nowadays, the role of early childhood educators is crucial for children's development, which highlights the importance of their professional recognition and up-to-date training. Thus, the study under discussion points out that universities and higher education institutions need to adapt to emerging trends, such as transnational online education, to prepare these educators effectively. The aim is to provide pre-service early childhood educators with a comprehensive training

that allows them to adapt to the different cultural changes of each era, to encourage innovation and the use of educational technologies to meet the challenges of the global labor market and to ensure continuous professional development. It is important to mention that contemporary child's learning process is characterized by a diverse range of modalities, with games and technology occupying a prominent position, Medina-Gómez, Cely-Betancourt & Abreus-González (2023).

Professional acknowledgement of early childhood educators.

In modernity, early childhood educators have gained recognition for their work not just because of their professional expertise but also because of their ability to engage with the knowledge that underlies their practice. This knowledge oscillates between two distinct domains: pedagogy and the specific knowledge of teaching, which is considered subsidiary to the disciplines of knowledge that support them. This type of relationship with the knowledge inherent to the teaching profession materialized, with early childhood education, because, as such, it is not inscribed in a specific discipline (Acosta, 2020). Instead, it draws upon a range of sources, including pedagogy and didactics, the psychology of development and learning, and more recently, technology and the arts, which are also considered contributing to the formative process of children.

In modernity, early childhood educators earn recognition for their work by showcasing not only their professional expertise but also their ability to engage knowledge that supports their practice. This knowledge oscillates between two distinct domains: pedagogy and the specific knowledge of teaching, which is subsidiary to the disciplines of knowledge that support them. Early childhood education has established this type of relationship with the knowledge inherent to the teaching profession because it is not limited to a specific discipline (Acosta, 2020). Instead, it draws upon a range of sources, including pedagogy and didactics, the psychology of development and learning, and more recently, technology and the arts, which are also considered contributing to the formative process of children.

Initially, the welfare model centered around the care and attention provided to young children and their mothers. This began in the 19th century with the establishment of asylums and hospices. Their achievement was made possible within the context of health and care policies for the underprivileged, which had not yet made educating people about their fundamental human rights a priority. It served as a reaction to the challenges resulting from urbanization and the rapid industrialization of cities. Preschool education institutions were established due to their inclusion of more advanced recreational or educational elements in some cases. Eventually, this paradigm could work alongside teacher preparation programs at education colleges for early education levels.

Additionally, the distinction between care provided in the public, and private sectors became clearer. The former focused on the welfare model, emphasizing health, hygiene, and prevention, while the latter was centered on pedagogy and the implementation of innovative educational approaches. Kindergartens were accessible to socially affluent individuals, which was why pedagogical models like Maria Montessori's were utilized. Specialized institutions, such as Colombia's National Pedagogical Institute founded in 1917, made it easier to adopt this model for teacher training.

The latter part of the 20th century marked the culmination of preschool education's progress. It started with the establishment of global norms for the emerging educational frameworks of recently independent countries. The aim was to achieve universal education, as it was thought to be a prerequisite for accomplishing international objectives. The formalization of preschool as a part of the first educational system, the creation of official organizations for the defense of children's rights (like the ICBF in Colombia, founded in 1968), the training of community agents and public-level carers, and the university-level preparation of preschool teachers were some of the significant events that occurred.

In this context, it should be mentioned that the acknowledgement of the professional nature of early childhood educators' work has been linked to the international visibility of early childhood education, particularly since the mid-1900s, when educational issues progressively became global issues, with early childhood education emerging as one of them.

Consequently, significant conferences and international declarations on early childhood education, such as the UNESCO World Conference on Early Childhood Care and Education (2010) and the 2015 UNESCO report on the evaluation of the Education for All Goals, have acknowledged the necessity for specialized training and qualifications among those engaged in the education of young children. This is in response to the growing demands for quality education in the early years of life.

The foundation of this stance is the firm belief that the empowerment and autonomy of the teaching profession is contingent upon a shared, highly specialized knowledge base that is collectively constructed and validated by its members. (UNESCO, 2016). Discussing the quality of education, it is essential to consider the impact of education on people's lives. Education is pivotal in enhancing individuals' quality of life, improving their lifestyle, and expanding opportunities, (Garcia & Acosta, 2012)

It is important to note that the arguments in favor of early childhood education, which play a significant role in shaping the professionalism of early childhood educators, have primarily focused on its positive impact on children's subsequent schooling in the primary education system. Alternatively, they have also been situated within a broader context of social and economic values that are linked to the growth or development of the capitalist system. These arguments, however, are in tension with those that find intrinsic value in early childhood education from the perspective of children's rights, child development and the humanization of the world. The apparent tension between these two types of arguments appears to influence the way the social and professional status of the early childhood educator is established.

Given the differing and sometimes contrasting economic and social arguments that arise from contexts on a smaller scale (local, regional), it is necessary to focus on the intrinsic and specific reasons that give early childhood education its own meaning. This meaning is derived from the interactions, rhythms and pedagogical sense of early childhood education as an end, linked to the development of children and their right to education (Mancera, 2014). It is also necessary to consider the impact of these factors on the professionalization of early childhood educators. In line with the suggestions put forward by Barrera et al. (2013), it is evident that there is a significant discrepancy in the terminology used to describe early childhood education, with different names being applied, including early childhood pedagogy, preschool education and early childhood education. This ultimately results in a lack of consistency in the designation of educational agents, with different terms being used to refer to the same role. The lack of a consistent terminology, with terms such as "early childhood educator," "preschool educator," or "kindergarten educator" being used interchangeably, makes it challenging to delineate the epistemic differences and scope of each of these roles.

The professional recognition of early childhood educators alludes to more than fixed elements; it also encompasses constitutive tensions that currently define their identity and distinguish them from other professions. When viewed from a macro-systemic perspective, these tensions can be expressed as the discrepancy between expectations at the international and national levels, which tend to prioritize the fulfillment of programmatic goals and the allocation of resources. The analysis of economic indicators, the use of resources, profitability, efficiency and cost-effectiveness, and the understanding of the pedagogical knowledge inherent to early childhood education are privileged by teachers in training and as well as by the various agents and training institutions in terms of pedagogical practice, reflection on practices and research as a source of knowledge, and the autonomous construction of professionalism. This is linked to the values that find in early childhood education a good.

In the case of early childhood education, the absence of a specific discipline to guide the knowledge and action of its professionals (except for pedagogy) is notable. However, this absence can be addressed by the interdisciplinary approach that constitutes the knowledge of this profession (Kaufman, 2016). This approach is informed by the central notion of the integral development of the child, which is understood as a normative expression of what is known as their best interests. It can be argued that, although the child educator is not an expert in child development psychology, nor a neuroeducator, nor a special educator, they can be an expert in the exercise of contextualizing contributions from these fields in the pedagogical understanding of the phenomena they deal with and intervene in. This is not to say that the child educator is an expert in child development psychology, neuroeducation or special education per se, but that they can become an expert in the application of insights from these fields to their pedagogical practice.

The status of early childhood educators is undergoing a process of professionalization, which is leading to the formation of a multidisciplinary knowledge base. This is constituted by different disciplines and facilitates conversation in the development and contextualization of enhanced learning environments. The boundaries of a single discipline do not constrain professional training and pedagogical techniques; rather, they occupy a position of fundamental and transcendental importance. This indicates that the official policy is oriented towards promoting reflection and comprehension of knowledge and experiences associated with the certification process, the exchange of expertise and the integration of theoretical and practical knowledge, all of which have been endorsed by the academy (MEN, 2017).

It is important to highlight that, within the field of early childhood education and its associated professionals, there is a prevailing sense of tension, which, although not exclusive to this field, is expressed nuances. Early childhood education

professionals define this tension as the discrepancy between perceiving early childhood education as a mere occupation and recognizing it as a profession.

From the perspective of those employed in education, two key aspects characterize the nature of teaching work. Firstly, the work processes undertaken within educational institutions extend beyond the confines of the classroom and the school, instead encompassing a multitude of social interactions. Secondly, teaching work is inherently productive, particularly in creative endeavors. From this perspective, suitable teachers would be those engaged in educational work, including monitors, educators, technicians and teachers, who are committed to creating optimal learning conditions for the children in their care. According to UNESCO (2016), early childhood teachers in education have a vindicatory character, shaped by collective struggles for improved working conditions, social status, decision-making authority, and labor protection.

From a professional perspective, the role of teachers is one that demands highly specialized work, rational and technical competences that are exclusive to their profession and that are learned in specific times and places. In alignment with this perspective, which is also consistent with the standards set by international organizations such as the OECD (Organization for Economic Co-operation and Development), only those with tertiary-level training in teaching are included. It is evident that this criterion excludes a considerable number of educators and community agents who are currently engaged in teaching roles without having undergone this specific form of higher education. Consequently, countries with the largest number of non-conventional or non-formal programs believe that their early childhood education workforce is being undermined. In countries such as Nicaragua, Honduras and Guatemala, there is a call for a more expansive conceptualization of the teaching profession.

It is noteworthy that, based on these studies, UNESCO (2016) reports that countries associate these perspectives with the care that should be taken in early childhood education. In educational programs where an overarching vision is in place, professional teachers are more common, whereas in programs that prioritize care, the role of other social agents is more prominent.

The tension between the profession and teaching work with early childhood educators can be understood from the perspective that, although initially work and profession are not opposing elements, the exercise of work requires knowledge and certified professional competencies, which are deployed in specific work environments as forms of knowledge and know-how. This results in significant elements of tension that oppose the actual logic of work environments and the logic of training and professional practice.

Considering the reflections, it is pertinent to highlight certain aspects, including the dearth of salary recognition, the suboptimal human and material conditions, the precarious nature of the pedagogical environment, and the conflictive dynamics between parents and educational actors. These factors starkly contrast with the current demands of professionalism in early childhood education, as evidenced by the graduate profiles, which increasingly emphasize research, innovation, and the production of pedagogical knowledge. This tension could ultimately be conceptualized as a tension between the ideal of autonomy (professionalism) and the growing heteronomy typical of a good deal of early childhood education contexts.

According to UNESCO and Hargreaves, early childhood educators are working in a post-modern professional period. This means managing a broad and complex customers, working in a setting of growing moral ambiguity, where a variety of pedagogical strategies are effective, and where a growing number of social groups are speaking up and asserting their influence (Hargreaves, 1997, cited in UNESCO, 2016). There are two actions that early childhood educators can take in response to this event. The initial step is to seek collaborative alliances with emerging stakeholders and new interest groups with the objective of identifying shared objectives and enhancing early childhood education methodologies. The second is to recognize that these transformations may ultimately result in a gradual de-professionalization and a reduction in the status of the early childhood educator. A multitude of additional factors, such as the challenges and pressures faced by individuals in the field, substantiate this perspective.

However, from the perspective of Zabalza Beraza and Zabalza Cerdeiriña (2011), the context of uncertainty should not necessarily be viewed as a negative factor. Rather, it could be argued that it allows for a greater breadth of competencies in the staff, which enables a more comprehensive response to the demands placed on nursery schools by contemporary society. The objective is to guarantee that the diversity of approaches is effectively harnessed and that all those involved in the education of young children succeed in creating a positive synergy that increases their effectiveness. It is therefore evident that teamwork skills are a prerequisite for the training of future early childhood educators.

Training for those pursuing a career in early childhood education

The training of early childhood educators has received various responses throughout history. This reflects the evolving perception of childhood and the increasing complexity of its representation. It also demonstrates the growing understanding of the importance of early childhood education. Consequently, there has been a shift in the demand for professional training for early childhood educators. Previously, such training was primarily offered at the secondary or teacher training level. However, this trend has changed, as it is now recognized that higher education or tertiary level training is needed. This change is driven by the understanding that the knowledge imparted at this level is essential for effective educational interventions with children.

According to Cely-Betancourt (2023), the teaching processes in higher education are becoming more challenging. The contemporary socio-economic context requires professionals who can engage in critical and reflective practices. These professionals must also contribute to the development and transformation of society through their professional preparation. To meet these demands, early childhood educators need to possess problem-solving skills and the ability to adapt to the constant changes that characterize the modern world.

Acosta (2020) argues that the diverse implications of the question regarding the training of early childhood educators, which pertains to the professional domain of early childhood education, allow for the identification of distinct historical processes that have shaped the training of early childhood teachers. These events demonstrate the influence of social, cultural, economic, and political processes on the specific educational and formative issues at stake. To study teacher training, it is necessary to take up the history of early childhood education, as well as its associated practices and discourses on childhood, which collectively constitute its epistemological status. These practices and discourses have been the subject of educational policies, specialized knowledge, and, in conjunction with this, training methods for the educators responsible for the educational process.

The study also highlights the significant impact of teacher training and the political climate on the establishment, progress, and evolution of the field. This dynamic shed light on the ongoing struggle between this field and the educational sector, especially concerning specific educational regulations, reforms, and policies that have shaped the training of early childhood education teachers over the past fifty years. Consequently, the institutionalization and reform processes in children's education can be traced back to the political, legal, academic, and scientific discussions surrounding childhood, which have been influenced by prevailing beliefs during different historical periods (Acosta, 2020).

In terms of early childhood teacher training policies, UNESCO published a state-of-the-art report in 2016 on policies for the training and professional development of early childhood teachers in Latin America and the Caribbean. Additionally, the organization provided a set of guiding criteria for the formulation of public policies in this field.

As indicated in this source, the challenges confronting early childhood teacher training policies in the Latin American region are multifaceted and rooted in the distinctive configuration of the professional space, as previously discussed, as well as the idiosyncrasies of each national context.

The initial challenge at the policy level is the lack of visibility regarding the tensions or divergent positions that ultimately pertain to international debates on early childhood education, or education in general. Consequently, the issue pertains to the identification of the role these discrepancies in comprehension, frequently rooted in the specificities of each context, should occupy within the policy framework, and thus inform the design of early childhood educator training programs.

The second issue pertains to the necessity for conceptual and epistemic clarification of the foundational concepts of the field of Early Childhood Care and Education. This is particularly relevant given that these concepts tend to become sedimented and naturalized around often static understandings, which have significant implications for the role of the early childhood educator. The exercise of the aforementioned role has been significantly affected by the dominant force that has emerged in this field, the welfare-oriented approach.

The third problem refers to the implications of the growing and increasingly visible demand for early childhood education that respects diversity in different dimensions (ethnic, racial, cultural, gender, among others) and as a full expression of the understanding of human rights, and in particular children's rights. Inclusive education thus encompasses a variety of areas that are not limited to disability or special educational needs, but also refers to cultural and social areas that were previously unthinkable, to the point of becoming a new educational paradigm (Aguerrondo, 2008).

Consequently, this necessitates a re-evaluation of the training requirements for teachers, who are pivotal figures in this process. UNESCO has acknowledged that the qualifications and training levels in many countries are inadequate to guarantee the quality of care and education required for the diverse contexts and social groups, particularly with non-conventional or alternative modalities (UNESCO, 2010).

This is why, at the current time, one element of teacher training policy is beginning to be the profiling of competencies for inclusion, which can ensure that new generations of educators can achieve equity based on diversity and the right to quality education, even in adverse conditions, thus breaking down barriers to learning. This undoubtedly constitutes a significant challenge for early childhood teacher education policies. As with the challenge associated with the epistemic level, it necessitates a clarification of the scope that inclusive policies for the training of early childhood educators would seek to achieve.

Besides the issues pertaining to the training of early childhood educators, there are other concerns, such as the professionalization of early childhood educators who are not university-qualified teachers. This group comprises a significant number of individuals, including community mothers and caregivers, who typically serve early childhood populations in contexts of vulnerability. Furthermore, issues pertaining to the caliber of training programs and the criteria utilized to assess them may also be pertinent. Additionally, the challenge of recruiting or attracting the most suitable candidates for early childhood teacher training is a significant concern.

The early childhood educator training curriculum

Besides policies, the teacher training curriculum for early childhood education represents the most comprehensive articulation of the intentions that are established and defined at other levels, including policy guidelines and institutional commitments. The principal function of the curriculum is to facilitate the translation of pedagogical principles and objectives into classroom practice. It is for this reason that the curriculum must synthesize pedagogical practice and provide guidance on the action and reflection generated by our praxis. The curriculum unites theoretical and practical elements, contemplation and action, general pedagogical principles, and classroom didactics, De Zubiría (2016).

The curriculum is therefore the progressive concretization of various training intentions and the progressive selection of contents and experiences that will lead to the achievement of the training profiles established from the outset. With early childhood educators, this entails representing one of the most significant influences for the integral development (cognitive, social, affective) of the youngest children, in conjunction with other key factors such as the family or the cultural environment. There appears to be a substantial international consensus on the pivotal role of the early childhood educator.

Nevertheless, beyond these formal elements, the current question regarding the teacher training curriculum for early childhood education can be essentially defined as a question about its quality and, consequently, about the competences or skills that it fosters for pedagogical work with children. In this regard, quality, competencies and curriculum are inextricably linked.

Zabalza (2020) asserts that there are two categories of teacher training programs: those that are effective and those that are merely mediocre. All the aforementioned programs provide their participants with the necessary qualifications and accreditation to pursue teaching roles. However, only those programs that are of a high quality can adequately prepare future professionals, ensuring that their professional practice is highly effective in the development and learning of the children in their care.

According to the review carried out by Zabalza Beraza and Zabalza Cerdeiriña (2011), there are at least six ideas that structure the quality of an early childhood educator training program in terms of the capacities of its graduates: 1). Have in-depth understanding of child development; and 2). Show proficiency in creating curricula for the designated age range. 3). Learn and put into practice new teaching techniques for young children; 4). Gain knowledge of the field (in this example, early childhood education); 5). Gain self-awareness; and 6). Become acquainted with the educational establishments where they will be working.

It is possible to supplement this list with additional structuring ideas, such as the design or development of learning experiences in enriched environments, which should be carried out under the circumstances of the context and the characteristics of the population of the groups served. Other possibilities include the development of capacities linked to research and innovation in the field.

In light of the findings thus far and in alignment with the desirable characteristics identified for a curriculum in early childhood education, it can be posited that at least the following elements are essential: a) that it be oriented towards the development of skills or competencies; b) that these skills or competencies respond to the characteristics and/or demands of the different environments in which children develop; c) that pedagogical practice or professional practice have a central place in the training, in such a way that the theoretical training received can be contextualized from it; and d) that it enables the student to build a personal training path that involves deontological, human, affective elements as constituents of a personal training itinerary, which is not reduced only to the training of professional competencies.

Competency-based training in early childhood educator training

According to Tobón (2013), competences in Complexity Theory are context-specific and intricate processes of performance. These processes combine different types of knowledge, including the skills to navigate the complexities of existence, action, understanding, and coexistence. Through this integration, individuals are encouraged to partake in activities and problem-solving with a sense of challenge, motivation, flexibility, and creativity. Metacognitive processing, continuous improvement, and ethical commitment form the foundation of the understanding and entrepreneurship perspective. The goal is to support personal growth, build and enhance social connections, pursue sustainable economic development, and protect the environment and biodiversity.

On the other hand, Denyer et al. (2011) highlight a dichotomy that is not always acknowledged within the French tradition of competences. This can be conceptualized as a divergence between two distinct perspectives: a narrow and a broad one. The former corresponds to the emphasis on the ability to perform a task or to apply knowledge under instructions (an elementary degree of competence), whereas the latter corresponds to the capacity to respond effectively to a novel and complex situation.

The significance of Denyer et al.'s findings lies in the fact that it does not mean education loses its nature as a realm of endless possibilities. Important authors like Kemmis (1988) have traced it in their work on curriculum. Kemmis discusses Josep Schwab's contributions in this work and highlights the Aristotelian differentiation between technical and theoretical action. The concept of technical action involves following a framework of established theoretical ideas.

The proposal emphasizes the importance of early childhood education teachers developing competencies that encompass a practical approach beyond traditional notions of welfare. This is due to the complexity of contexts and situations in which the education of this population segment takes place, as previously discussed. Consequently, it is evident that critical thinking and decision-making that goes beyond the technical or theoretical level is required.

The competency-based approach to training early childhood educators should result in the development of skills, abilities and capacities at the cognitive, procedural and attitudinal levels. The objective is to equip educators with the ability to respond innovatively and relevantly to the contexts in which pedagogical practice takes place and their professional lives. In the context of university training for early childhood educators, the aforementioned process should be conducted under the following conditions: the comprehensive organisation of the educational process, with due consideration for all relevant competencies; the promotion of student self-determination (autonomy) throughout the process; and the implementation of contextual education (Shakirova et al., 2020). This last element is of particular significance within the theoretical framework of early childhood educator training, as competence is ultimately concerned with knowledge and understanding of how to act and interact within a given context. Consequently, the role of professional practice in competence-based training is also of paramount importance.

In accordance with the definition of competence as outlined by Tobón (2013), encompassing comprehensive actions to identify, interpret, argue and resolve problems in a context characterized by competence, ethics and continuous improvement, four implications have been identified by the author when integrating the contributions of complex thinking into this definition. These implications have significant implications for the training of early childhood educators in terms of curriculum, competences and professional practices.

The initial proposition is that competences are not oriented towards tasks, as postulated by functionalism. Instead, they are concentrated on problems, thereby placing greater emphasis on the dynamics of the context and its processes of order-disorder-reorganization. The second consequence is that competences are not behaviors for organizations to achieve their goals, as proposed by behaviorism. From the perspective of complex thinking, competences are actions that enable individuals to realize their full potential, thereby contributing to the enhancement of the social fabric, the strengthening of the economy, the

management of the balance and sustainability of the ecological environment, and the promotion of a superior quality of life in all spheres.

The third consequence is that all competences are a system, as Morin (2004) proposes, and this means that they are actions that systemically articulate the following four elements: knowing how to be, knowing how to do, knowing how to know and knowing how to live together. This implies that no single category of competence can be identified, as all competences integrate the processes. Conversely, when complex thinking is not adhered to, any human action or process is frequently regarded as a competence.

A fourth consideration is that competencies entail modifications to educational and organizational structures. The sole viable approach to affecting these modifications is to alter the prevailing modes of thought, as Morin suggests. The question arises as to why numerous educational institutions and organizations around the world espouse the use of competencies in their practices, yet, fail to implement them or even act in opposition to them. This is because there has been no alteration to the way in which they think. It is possible that these institutions have introduced new curricula or new activities in the workplace, yet continue to adhere to traditional schemes (Tobón, 2013).

According to Tobón, this final outcome poses challenges for early childhood education institutions and their curricula. The incorporation of the competency-based approach is often reduced due to the challenge of overcoming instrumentalism. The main challenge lies not only in teachers' cognitive appropriation, but also in the transformation of their practices and the pursuit of shared goals to prevent isolation and entropy. This is demonstrated through a hidden curriculum that avoids change and promotes uniformity.

To meet this challenge, it would be necessary to implement organizational changes that facilitate collaboration and planning among trainers. This would entail a gradual transition towards a more coordinated approach to training, encompassing curriculum development and, most importantly, allowing for the recognition and exchange of knowledge and practices. We could then state that the essence of the educational process in a competence approach is the creation of situations and the support of actions that can lead to the formation of a specific competence. It is necessary to model the parameters of the environment and the activity situation to develop distinctive competences.

The challenge for the training of early childhood educators will then be to integrate the comprehensive and complex set of competencies required for these professionals into their daily work routines and professional practices. This integration must ensure that the knowledge and expertise components are not overlooked in favor of the more practical aspects.

Challenges Early childhood educators face in today's world.

The role of teachers who specialize in working with children is of great importance, as they bear a significant responsibility for the well-being and education of young learners. This period of a child's life is characterized by rapid growth and development, and it is during this stage that a substantial portion of the knowledge and skills that humans can acquire throughout their lifetime is acquired, Jiménez et al. (2023). This suggests that those working in the field of early childhood education must develop innovative pedagogical skills to respond to the changing needs, demands and rapid progress of new societies.

Nevertheless, the term 'disruption' has been used in the context of innovation in education for several years, even prior to the pandemic. At least one source, namely Acaso and Meglás (2013), can be cited as early as 2013. Espitia and Romero (2021) posit that a genuine transformation in professional teaching practice and a positive impact on the achievement of meaningful and experiential learning can only be achieved through the implementation of a comprehensive and systematic approach. To effect a revolutionary change through the DAT method (Detect, Analyze and Transform), which is characteristic of the disruptive approach, allows, upon detection, the arousal of suspicion as a tool to prompt reflection on practice, analysis in relation to a critical review of the elements that have become evident in the detection, and transformation of these detected and analyzed aspects with the objective of modifying previous behavior by expanding and updating pedagogical components.

In accordance with the DAT method and the authors (Acaso and Meglas, 2013; Espitia and Romero, 2021), the teacher is required to conduct a feedback process on five aspects, which can be summarized as follows: The relationship between teaching and learning must be de-naturalized (teaching and learning are not one and the same), the power dynamics in the classroom must be transformed (the teacher is a companion), a different vision of the classroom must be achieved (the classroom is a place where

knowledge is created and shared), and the focus must shift from simulation to experience (which also implies a shift from evaluation to research).

Nevertheless, this novel context exhibits a common thread, namely the integration of cutting-edge technological developments and their implementation in education. Several experiences and pedagogical concepts may be identified, including the flipped classroom, adaptive learning, smart classrooms, learning ecologies, gamification, and learning analytics, among others. These elements, which challenge traditional approaches to child education and educator training, largely correspond to developments supported by digitalization of teaching and learning processes. They also align with emerging questions about everyday interactions in the educational process, with the aim of enhancing its relevance.

These developments are in line with the concept of the so-called 'Fourth Industrial Revolution' and the ongoing emergence of disruptive technologies, including the most advanced applications or apps, among many other examples. These have recently been consolidated around the concept of artificial intelligence (AI). The latter can be defined as computational systems designed to interact with the world through capabilities typically associated with humans (Luckin, 2016, cited in Guerrero, 2023).

Nevertheless, the potential of AI (artificial intelligence) in the field of education is becoming increasingly evident, extending beyond the conventional understanding of technology's role in education to encompass the mere manipulation of data or algorithms, or the acquisition of previously inaccessible information. The impact of this disruptive element is such that it extends beyond the competencies previously considered the exclusive domain of the teacher's intelligence.

The application of artificial intelligence (AI) can facilitate the personalization of learning, enabling the creation of individualized learning pathways with immediate feedback and continual adaptations to the pace of each learner. Furthermore, it can facilitate improvements in teaching practice, providing automated feedback to educators, reducing the time spent on remediation, and enabling the management of detailed data on the learning outcomes of large student populations. At the systemic level, AI can facilitate the development of novel management tools that can provide early warning of potential learning difficulties or school dropout (Guerrero, 2023).

The increasing prevalence of artificial intelligence (AI) in educational processes aligns with the growing importance of technology and its associated skills in the labor market, particularly in the transformation of professions within the context of the Fourth Industrial Revolution. Pernías (2017), as cited in Pérez, Mena and Elicerio (2020), posited that the employment categories most likely to experience a significant decline in job opportunities are, in descending order of projected job losses: office and administrative support, manufacturing and production, construction and extraction, art, design, entertainment, sports and media, legal services, and installation and maintenance. Conversely, the categories that will experience the most significant growth are expected to be, in descending order of magnitude, financial and business operations, management, computer and mathematics, architecture and engineering, and sales and education.

It is acknowledged that these transformations are beginning to have consequences for the role of the educator, particularly in terms of pedagogical and didactic practice. This implies a significant rethinking of the content and form of educational interaction to ensure the continued relevance of the school as a privileged device for training. It is evident that the role and scope of the teacher has been subject to scrutiny on numerous occasions, particularly considering technological advancements. While there are arguments to be made against the necessity of the teacher's role, the fact remains that in contexts where social inequality persists, the teacher's role as a social mediator remains a crucial one. This is not to suggest that the teacher's role is indispensable, but rather to highlight that it continues to serve a purpose beyond what might be perceived as its mere existence.

It is therefore important to consider the training of teachers in digital competences, with a view to ensuring that they can comprehend the new technological development scenarios associated with artificial intelligence, as well as its possibilities, scope and risks. It is worthwhile to consider the points made by Pérez, Mena and Elicerio (2020) who state that the contemporary student is seeking a connection with technology that facilitates interaction and engagement. This is particularly relevant in the context of theoretical-practical solutions that can be applied pedagogically, transforming the student from a passive digital receiver to a knowledge producer. It is, however, important to clarify, as Selwyn (2016) states, that digital technology does not automatically enhance, foster, or transform education.

In the field of early childhood teacher training or early childhood education, it is important to think about the possibilities that are opened or offered by the emergence of disruptive pedagogies in all their range of expressions, including artificial

intelligence, which would initially entail a delimitation of the scope and purpose of favoring the interaction of children and teachers with these pedagogies. This would lead to the elucidation of the meanings of these new possibilities, especially regarding the concept of integral development and its relationship with the guiding activities (art, play, literature and exploration of the environment). It is possible that the impact or incidence of disruptive pedagogies and developments in artificial intelligence in this field has yet to be explored, but a key to understanding it would be given in terms of thinking about it not only as the arrival of a new capacity or device but from a new concept of childhood understood in its broad meaning of social and cultural construction.

Discussion and conclusions

It is essential to understand that the role of early childhood educators in today's education system is influenced by a specific set of knowledge, pedagogical practices, and institutional factors deeply rooted in history. Modernity brought about an ideology that influenced how childhood and professionals in the field of child work are perceived and acknowledged. The idea of viewing childhood as a distinct stage of adulthood has changed over time. The pedagogical approach centered on children's needs and development was outlined from Rousseau to Montessori.

The professional acknowledgment of early childhood educators has expanded to include various aspects, such as pedagogical principles and specific teaching methods. From the initial welfare models to the more advanced approaches exemplified by Maria Montessori, the significance of specialized training and the evolution of pre-school education in the 20th century is underscored. The care of children in their earliest years is of the utmost importance for their subsequent human development. This emphasizes the necessity for programs that integrate nutritional and stimulating elements to achieve optimal results in terms of children's growth and development. In a context that is seeking to enhance early childhood education, it is vital to promote collaboration, value diversity, encourage teamwork and develop a range of competencies in educational personnel to meet the demands of today's society.

Early childhood education and training have changed over time to incorporate many theories, techniques, and practices in response to the demands of society and history. Today, institutions and degree programs must adjust to three major changes in order to stay competitive in the current academic environment: 1). It is imperative that educational models are adopted which reflect the emerging economies and foster social inclusion through transnational education. 2). It is recommended that transnational education and internationalization be increased to reduce the existing inequalities between elite universities and other institutions, thereby offering all those involved equitable opportunities. 3). It is imperative that online education be given a higher priority to meet the demands of the modern age.

This will entail the promotion of hybrid and collaborative models of learning, which are better equipped to prepare professionals for the realities of the present era. Furthermore, the significance of innovative learning and the utilization of technologies to address the challenges of the global labor market is emphasized. It is imperative to modernize educational methodologies to align with evolving job requirements and teaching roles, encompassing shifts in funding, educational structure and the training of academic staff. Enhancing the working conditions of teachers through an appropriate budgetary allocation is pivotal to enhancing the quality of education in higher education institutions and preparing professionals to meet the demands of the labor market. Early childhood education requires higher levels of training, reflecting the growing importance attached to early childhood education.

This development marks a significant change from earlier times when secondary education or teacher training was considered sufficient. In this way, the influence of historical, social, cultural, economic and political processes has been fundamental in shaping the education and training practices of early childhood educators, creating tensions with educational regulations and policies. This constant interaction has shaped the training process of early childhood educators, highlighting the dynamic and open nature of the field.

References

1. Acosta, N. (2020). Formación de maestros en educación infantil: revisión de tendencias investigativas. *Pedagogía Y Saberes*, (53). <https://doi.org/10.17227/pys.num53-10402>
2. Aguerrondo, I. (2008). Revisar el modelo: un desafío para lograr la inclusión. *Perspectivas*, 38(1), 61-80.
3. Aries, Ph. (1988) *El niño y la vida familiar en el Antiguo Régimen*. Barcelona. Taurus.
4. Barrera, M. A., Lopera, A. L. T., & Mazo, Y. M. (2013). La formación de maestros en educación para la primera infancia. Una visión desde un campo discursivo regional y local. *Revista Senderos Pedagógicos*, 4(4), 77-89.

5. Cely-Betancourt, B. L.(2023). El perfil del licenciado en lenguas extranjeras: Un reto pedagógico para los docentes formadores. *Revista Sociedad & Tecnología*, Vol. 6(1), 81-97. DOI: <https://doi.org/10.51247/st.v6i1.326>.
6. Denyer, M., Furnémont, J., Poulain, R., & Vanloubbeeck, G. (2011). *Las competencias en la educación: un balance*. Fondo de Cultura Económica.
7. De Zubiría, J. (2016) *Los modelos pedagógicos*. Bogotá: Magisterio
8. Espitia, M. Á., Romero, A. (2021). La pedagogía disruptiva como nuevo paradigma educativo: un análisis desde la literatura. *Universidad el Bosque*. Recuperado de: <http://hdl.handle.net/20.500.12495/6697>.
9. García Jiménez, O. L., & Acosta Rodríguez, D. C. (2012). ISO 9001-2008 y EFQM: un estudio comparativo para su implementación en la educación.
10. Guerrero Melendrez, A. S. (2023). Programa educativo digital Profuturo para desarrollar el pensamiento creativo en estudiantes de educación primaria, Lambayeque.
11. Jiménez, O. L. G., del Pilar García, Z., & Sierra, R. M. (2023). Las prácticas profesionales en la formación y su impacto laboral, una revisión bibliográfica. *Polisemia*, 19(35), 103-116.
12. Luckin, R., Holmes, W., Griffiths, M. & Forcier, L. B. (2016). *Intelligence Unleashed. An argument for AI in Education*. London: Pearson.
13. Kaufmann, V. (2016) *Primera Infancia, panorama y desafíos para una mejor educación*. Buenos Aires: Aique.
14. Kemmis, S. (1991). Critical education research. *Canadian Journal for the Study of Adult Education*, 5, 94-119.
15. Hargreaves, A. (1997). Cultures of teaching and educational change. In *International handbook of teachers and teaching* (pp. 1297-1319). Dordrecht: Springer Netherlands.
16. Mancera, A (2014). *La educación inicial para la primera infancia como un derecho impostergable para las niñas y los niños*. Fundación Convivencia.
17. Medina-Gómez, D. C., Cely-Betancourt, B. L., & Abreus-González, A. (2023). Octalysis framework: a favourable environment to increase successful practices in English as a Foreign Language (EFL) classrooms. *Revista Metropolitana de Ciencias Aplicadas*, 6(2), 70-78.
18. Ministerio de Educación Nacional-República de Colombia (2017). Bases curriculares para la Educación Inicial y Preescolar. Recuperado de: <https://siteal.iiep.unesco.org/bdnp/3178/bases-curriculares-educacion-inicial-preescolar>
19. Montessori, M. (1982). *El Niño. El Secreto de la Infancia*. México, Diana.
20. Morin, E. (2004). La epistemología de la complejidad.
21. Museo Virtual de Historia de la Educación (2022). Orígenes de la Educación Infantil. Recuperado de: <https://www.um.es/muvhe/itinerario/origenes-de-la-educacion-infantil-1a-mitad-s-xix/>
22. Pernias, P. (2017). Nuevos empleos, nuevas habilidades: ¿estamos preparando el talento para la Cuarta Revolución Industrial?. *ICE, Revista de Economía*, (898). Recuperado de: <https://pdfs.semanticscholar.org/2745/32945c4fcffd8a410744e78e085020abb5c8.pdf>
23. PÉREZ Zúñiga, R., MENA Hernández, E., & ELICERIO Conchas, D. (2020). El nuevo enfoque de participación docente ante los retos y desafíos tecnológicos de la cuarta revolución industrial 1. *Revista Espacios*, 41(11).
24. Saenz Del Castillo Velasco, A., Goñi Palacios, E., & Camuñas Llona, A. (2018). La coeducación a debate. *Representaciones sociales en el profesorado de educación infantil*.
25. Shakirova, A., Fahrutdinova, R. A., Skorobogatova, A. I., & Diuanova, R. K. (2020). Professional Competences of Preschool Teachers: Integrated College-University System. *Utopía y praxis latinoamericana: revista internacional de filosofía iberoamericana y teoría social*, (10), 545-551.
26. Tobón, S. (2013). *Formación integral y competencias. Pensamiento complejo, currículo, didáctica y evaluación* (4ta. Ed.). Bogotá: ECOE.
27. UNESCO (2010) Conferencia Mundial sobre Atención y Educación de la Primera Infancia.
28. UNESCO (2016) Estado del arte y criterios orientadores para la elaboración de políticas de formación y desarrollo profesional de docentes de primera infancia en América Latina y el Caribe. Recuperado de: <https://unesdoc.unesco.org/ark:/48223/pf0000245157>
29. Zabalza Beraza, M. Á., & Zabalza Cerdeirina, M. A. (2011). La formación del profesorado de Educación Infantil. *Participación educativa*. pp. 103-113.
30. Zabalza, M. Á. (2020). Calidad en la educación infantil (Vol. 72). Narcea Ediciones.
31. Selwyn, N. (2016). Digital downsides: Exploring university students' negative engagements with digital technology. *Teaching in Higher Education*, 21(8), 1006-1021.