



Pedagogy and didactics of social sciences for early childhood education

Pedagogía y didáctica de las ciencias sociales para la educación infantil

Pedagogia e didática das ciências sociais para a educação infantil


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KEYWORDS

social sciences, didactic,
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ABSTRACT. Early childhood education is the stage in which the training process occurs in children from birth to the age of six, it seeks physical, affective, social and intellectual development, incorporates guidelines for coexistence, based on respect to differences, development of affective capacities and democratic values that facilitate social interaction. The research that supports this article aims to understand in depth the pedagogical, epistemic, didactic, neuropedagogical and neurodidactic strategies that reorient the teacher's action in the processes of educability and teachability in the area of social sciences and early childhood education. It is approached from an action research - reflection, directed from a comprehensive interpretive method with a bibliographic design. The result is that social thought is enhanced and developed from a pedagogical and didactic praxis pertinent to the nature, essence and context of the child. It reaches the conclusion of de-instrumentalizing the processes of educability and teachability and placing the human being at the center of the educational process as a multidimensional situated being, that is, a bio-psycho-neurocultural being.

PALABRAS CLAVE

RESUMEN. La educación infantil es la etapa en que se da el proceso de formación en niños (as) desde el nacimiento hasta la edad de los seis años, busca el desarrollo físico, afectivo, social e intelectual, incorpora pautas de convivencia, sustentadas en el respeto a las diferencias, desarrollo de capacidades afectivas y valores democráticos que faciliten la interacción social. La investigación

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que fundamenta este artículo, tiene como objetivo comprender a profundidad las estrategias de orden pedagógicas, epistémicas, didácticas, neuropedagógicas y neurodidácticas reorientadoras de la acción del docente en los procesos de educabilidad y enseñabilidad en el área de ciencias sociales y la educación infantil. Se aborda desde una investigación acción – reflexión, direccionada desde un método interpretativo comprensivo con un diseño bibliográfico. Obtiene como resultado que el pensamiento social se potencia y desarrolla desde una praxis pedagógica y didáctica pertinente a la naturaleza, esencia y contexto del niño (a). Llega a la conclusión de desinstrumentalizar los procesos de educabilidad y enseñabilidad y poner como centro del proceso educativo al ser humano como un ser situado multidimensional, es decir un ser biopsicosocioemocional.

PALAVRAS-CHAVE

ciências sociais, didática,
educação infantil,
pedagogia.

RESUMO. A educação infantil é a etapa em que ocorre o processo de formação das crianças desde o nascimento até os seis anos de idade, busca o desenvolvimento físico, afetivo, social e intelectual, incorpora diretrizes para a convivência, pautada no respeito às diferenças, no desenvolvimento das capacidades afetivas e democráticas. valores que facilitam a interação social. A pesquisa que sustenta este artigo visa compreender em profundidade as estratégias pedagógicas, epistêmicas, didáticas, neuropedagógicas e neurodidáticas que reorientam a ação do professor nos processos de educabilidade e ensinabilidade na área das ciências sociais e educação infantil. Aborda-se a partir de uma pesquisa-ação - reflexão, direcionada a partir de um método interpretativo comprensivo com desenho bibliográfico. O resultado é que o pensamento social é potencializado e desenvolvido a partir de uma práxis pedagógica e didática pertinente à natureza, essência e contexto da criança. Chega-se à conclusão de desinstrumentalizar os processos de educabilidade e ensinabilidade e colocar o ser humano no centro do processo educativo como um ser multidimensional situado, ou seja, um ser biopsiconeuroemocional.

“Awareness of the past is as important to the individual as it is to society. Through history, we can discover the record of the human race, share it and become part of it. It is an awareness that, nurtured in childhood, grows throughout life.”

(Cooper, H., 2002: 15).

1. INTRODUCTION

To address pedagogically and didactically the construction of social thinking in early childhood is to reflect on the interpretation, analysis and understanding that human beings make of all those events and phenomena that occur in society, product of group or individual action of the human subject. It can be said that the representation that human beings make of social phenomena in one way or another corresponds to the theory through which this social thinking is configured, as Paul Filmer states (1998)

Social theory is the construction and realization of the world in thought. It is a construction subject to human concern with the social sphere, with the character and condition of social life. It is then about social consciousness, a specific way of thinking, of thinking life in society. (as cited in Chiquito, 2016, p. 10).

According to this premise, it can be inferred that it is possible to develop social thinking in childhood, since the very moment a human being is born, he is a social being. Initially his social life takes place in the family environment, which extends to the school and the community in general. It is in educational organizations, where

the human being continues the process of socialization and knowledge of the world, being early childhood education the first step of the educational system, where the recognition and representation of social reality or the social fact by the educable subject begins. Canet et al. (2019) suggest the need to work on children's learning with imagination and creativity as didactic tools to incorporate the categories of social sciences, which contribute to the development of social thinking, especially the category of space, Aranguren (2013) states: "reconstructing and building new meanings of knowledge that aim at the formation of the 'being' with a critical and historical awareness is a transcendent task, where the formative processes are as relevant as the acquisition of scientific competences" (p.6).

Hernández and Pagés (2016) consider that:

The teaching and learning of social and historical content should consider not only the application of activities but also the social context, the interests of the institution and parents, as well as the characteristics of the group where they work. To this end, it is important that the goals are constructed and defined according to the needs and interests of the community where the preschool is integrated (p. 121).

Feliu et al. (2014) consider that for the analysis of social reality it is necessary to take into account six aspects: space, time, origin, causes and consequences, characteristics and identification of elements, norms, laws and values, emotions and feelings, assigning a fundamental role to the categories of time and space.

Research carried out in different scenarios, show how social sciences are little liked by students at all levels and have a little privileged and valued place in the curriculum (Barton & Levstik, 2004; Carretero, 1997; De la hoz, 2016c; Hernández & Pagés, 2014; Pagés & Fernández, 2010).

Therefore, understanding in depth the pedagogical, epistemic, didactic, neuropedagogical and neurodidactic strategies that reorient the teacher's action in the processes of educability and teachability in the area of social sciences and early childhood education becomes the objective that guides the research action, which leads to pose the following questions: How to develop from early childhood education a social thinking that facilitates the educable subject to approach social reality in a meaningful way? What pedagogical, epistemological, didactic, neuropedagogical and neurodidactic strategies should guide the action of the social sciences teacher in early childhood education? In a globalized, complex, uncertain and constantly changing world, framed in the local context of the social rule of law, what should characterize the processes of teachability and educability in the area of social sciences in early childhood education? How to guide from early childhood education the construction in the educable subject the categories of geographic space, historical time and human interactions, according to a complex, globalized world in harmony with a local reality?

2. METHOD

The objective and questions are answered from action-reflection research, where theory and practice are amalgamated as a whole, product of the pedagogical and didactic work in different scenarios and educational levels, in which reflection on action and action on reflection, become generating elements of theories that energize the work of the teacher.

The Action-Reflection research is based on the critical-reflective paradigm, which aims to generate a comprehensive process of the problems addressed through the direct participation of the subjects involved (De la Hoz, 2018; lafrancesco, 2003; Muñoz et al., 2005), it is a set of reflections that have their origin in the natural laboratory of teachers, such as the school organization and the classroom, defined as a living space of human interactions, where communication, culture and knowledge are present, they become the stimulating element and generator of the teacher's capacity for astonishment, to question and respond to the processes of educability and teachability that are lived within it.

The school organization and the classroom as a vital scenario mediates the encounter between human beings through dialogue that acquires sense and meaning in a concrete reality, which has a social, political, economic and cultural order (Cerdeña, 2021; De la Hoz & Hard, 2017).

Penetrating that microcosm called school organization and classroom, through an action-reflection research process, presupposes the stimulation of the ability to question and admire, which implies moving away from that world, staying in it and with it, thus making the critical insertion of the reality under study, through this exercise the reality is objectified and apprehended as a field of its own action - reflection, as Freire would say (1973).

Only man as a being who works, who has a thought-language, who acts, and is able to reflect, on himself, and on his own activity, which separates him from himself, only he, by reaching such levels, is a being of praxis. A being of relations in a world of relations (p. 41).

The Action - Reflection research is amalgamated and cemented in a bibliographic order design (Tamayo, 2012), initially the theoretical-conceptual foundation is made from secondary sources of the categories that constitute the essence of the research, such as: pedagogy, didactics, neuropedagogy, neurodidactics, teachability and educability, to penetrate into the epistemic reflection of the social sciences and the process of teachability and educability in early childhood education for the development of the infant's social thinking in a globalized world, Therefore, the educable subject is conceived as a biopsychosociocultural being, that is to say, a multidimensional being that has a biological, psychological, social, neurological and cultural reality, which makes him/her a unique and unrepeatable being.

Being an Action-Reflection research with a bibliographic design, a phased search is performed in the different portals (Google Scholar, Redalyc, Scielo, Renata, Neonet), the criterion of inquiry are the constituent categories of the research problem, 2. 150 articles of the categories teachability and educability and 187 articles on pedagogy and didactics of social sciences in early childhood education, from which 30 articles were selected that have at most ten years of edition, that respond to the objectives, nature of the method and design of the research and, high indexes of citations in the different search engines examined.

Having as an objective the deep understanding of the studied phenomenon, it is contrasted with the reflections made in different scenarios on the subject, particularly in the degree in early childhood education, the degree in social sciences, the master's degree in neuropedagogy, the diploma in neurodevelopment of the Universidad del Atlántico, the preschool, elementary and middle school levels of the Madres Marcelina and Hogar Mariano institutions in the city of Barranquilla - Colombia, where the researchers are present as teachers.

3. DEVELOPMENT AND DISCUSSION

Theoretical-conceptual foundation of: pedagogy, didactics, neuropedagogy, neurodidactics, educability and teachability.

From the epistemic perspective assumed, pedagogy is defined as the foundational knowledge that guides all the work done by the educator as a professional of education and culture, which gives meaning and intentionality to his work. Pedagogy is the theoretical-practical scientific knowledge that has as its object of study the processes of educability and teachability that are developed in the school organization, these two processes are two sides of the same coin called human formation.

From this position, we seek to overcome the narrow view of conceiving pedagogy as "the art of teaching", it is much more than simple devices for the development of teaching and learning, it deals with the deep reflection on what is the type of man, woman, citizen and citizen for a given society. In this order of ideas, pedagogy reflects and theorizes on the social fact called education, it carries out a discursive construction on the educational practice of teachers, this reflection has its origin in the scenarios where teachers exercise it, with the intention of problematizing and asking about the essence, nature and meaning of educational practice.

From the moment an educator takes a certain distance from the routine of "dictating classes" and asks himself about the being and meaning of educational policies, practices, processes, institutions or educational systems, he is initiating the pedagogical discourse, that is, the theoretical reflection on education (Penago, 2007, p. 38).

The reflection and theorization of these processes, pedagogy sustains them from an anthropological position because it implicitly carries a conception of what it understands by humanization in the light of contemporary human sciences.

Philosophical, since it has a teleological character because it seeks to understand the meaning of what it means to be an authentic human being.

Biological and neurological, since the human being undergoes a process of hominization, understood as the set of biogenetic and evolutionary processes that generate the emergence of the current Homo Sapiens Sapiens, a living organism that fulfills three vital functions: nutrition, relationship and reproduction, being the function of relationship the one that allows the human being to perceive everything that happens around him, it is performed through neurological processes, "the nervous system can be considered as a highly sophisticated communication network that through electrical signals that happen in milliseconds communicates the human being with the surrounding environment" (Toro, 2018, p. 1).

Similarly, pedagogy sustains the training processes from a historical, social and cultural theorization, given that the educable subject is a situated being, permeated by the conditions in which he/she is introjected. For the understanding of the educable subject, pedagogy establishes an interdisciplinary dialogue that is nourished by the social and human sciences and incorporates the emerging knowledge of cognitive

neurosciences, defines a theoretical and methodological condition that harmonizes the processes of educability and teachability, generates coexistence and logical coherence, the connection and integration between these processes, is assumed by pedagogy with its theoretical-practical foundations (De la hoz, 2016b).

While pedagogy as theoretical-practical knowledge reflects on the totality of teachers' educational practice, didactics as a pedagogical discipline assumes the practical part of the educational act, guided by pedagogical theory, "separated from practice, theory is pure inoperative verbalism, disconnected from theory, practice is blind activism" (Freire, 1985, p. 30).

Under this reasoning, didactics is much more than the simple set of strategies, tools, techniques and experiences that the teacher implements in the classroom to achieve learning; it cannot stop at them, since they are not the only determining elements of the didactic action of teachers.

Didactics builds its object of study from the reflection and action that it carries out on teaching, on the instructional processes, which acquire meaning when teachers have clarity about where they have to direct their efforts, what are the goals to follow, from which pedagogical foundations sustain the procedures, and from which pedagogical foundations they sustain the procedures.

The center of the didactic action is and must be the educable subject as a being situated with biopsychosociocultural characteristics, it is not about the use of strategies, techniques, instruments, sequencing of the contents blindly, by themselves, making their implementation something mechanical and instrumental. To teach didactically, that is to say well, is to be aware of where the teachers' actions are directed towards the achievement of the principles, aims, objectives and socially constructed goals. Didactics is not reduced to reflection and action on the method of teaching, to instrumental procedures and techniques that delegitimize pedagogical reflection on the teaching of knowledge,

There will be no truly formative teaching if the expert teacher in a discipline is not concerned and reflects at least intuitively on what is proposed with his teaching, how his students grow and advance in their training, what will be the rules that govern his relationship with the students, which experiences and contents are more important for their development and with which techniques it is better to teach each content according to its specificity (Flórez, 2002, p. 81).

Educability and teachability are two consubstantial processes of a whole called human formation, in spite of being two different processes, they are integrated, intertwined, articulated, approached and constitute the object of study of pedagogy and its discipline called didactics. These two processes cannot be studied and assumed in isolation, they complement each other, responding to the principles, goals and educational objectives that society has set as a goal, they respond to the conception of the educable subject. The essence of these two processes is the human subject, understood as a multidimensional being that cannot be susceptible to an instrumental reduction.

Educability is the process of transformation that can be generated in the human being from intentional and meaningful educational processes, for being susceptible to change, improvement, transformation, development of virtue, growth, characteristics of the human condition. Therefore, every subject is educable because it is unfinished, but also singular, unique, unrepeatably and situated.

Through educability we seek to shape the natural capacities and dispositions of human beings, in the perspective of their maximum realization, as individual, social, historical and culturally constructed beings.

Educability means the specifically human quality or set of dispositions and capacities of the learner, basically of his plasticity and ductility, which allow him to receive influences and react to them, thus elaborating new spiritual structures that personalize and socialize him" (Fermoso, 2019, p. 235).

Educability cannot leave aside the logics of curricular intentions, in the unquestionable direction that every student must, finally, be critically incorporated to the cultural, social, political, economic project, and to its processes of production of goods and services, with a view to financially sustain his ethical project of life (Gallego and Pérez, 1999, as cited in De la hoz, 2016a). This process focuses its intentionality on the socialization of the human subject, which starts in the family, being the school one of the fundamental scenarios of its configuration, but not the only one. Educability leaves its mark on the educable subject, it passes through the procedures, attitudes, concepts, meanings, experiences and the ways in which the formative process of the student is assumed.

Tedesco (2000) says:

Educability refers to two different types of factors: a) a basic cognitive development, which occurs in the first years of life and is linked to a healthy affective stimulation, good nutrition and adequate sanitary conditions, and b) a primary socialization through which children acquire the rudiments of a basic framework that allows them to join a specialized institution other than the family, such as the school (P.92).

The above leads to infer that, if in the family there are no significant educability processes that potentiate the primary socialization and basic cognitive processes, the results at school will be precarious.

For its part, teachability is the act through which pedagogically a knowledge is made teachable, integrating the epistemic conception, the pedagogical-didactic foundation that the teacher possesses of the discipline he/she teaches.

The conditions of teachability of each discipline are harmonized with the formative view that the teacher has, it is a construction based on the capacities that teachers have internalized on the epistemic conceptions of disciplinarity, interdisciplinarity and transdisciplinarity of the knowledge that is the object of teaching. This process has a historical, social, cultural, economic and political character, connected with the institutional educational project, which must respond to the socially established training goals.

Teachability is a pedagogical condition derived from the epistemological status of each science or discipline referred to its features of rationality and syntax, of theoretical and experiential content, which distinguishes the approach to its problems and specifically orients the way in which each discipline can or should be taught (Flórez, 2002, p. 89).

Didactics, having teaching as its reflection and action, is committed to the epistemologization of the knowledge that is the object of that instruction: the essence, historical development, object of study, methods, contents of that knowledge, are relevant aspects that determine the pedagogical condition of didactics in the process of teachability: What to teach? How to teach? With what to teach? Why teach? are aspects that must be harmonized with the view of the educable subject, likewise, it assumes a position on: How does the student learn and develop? What kind of experiences are more relevant and effective for the formation of students? With what techniques and procedures is it more effective to teach certain knowledge?

Therefore, the processes of teachability face the problem of why certain knowledge should be taught differently from others. In the case of the social sciences, the question is: What are the conditions of teachability of the social sciences? What is the pedagogical approach or theory that supports a good teaching process in the social sciences? What are the student's biopsychosocial and neurocultural conditions necessary for the learning process in the social sciences?

The didactic action, therefore, has as its direction and intentionality to realize the principles, aims, objectives and educational goals socially constructed and shared, collected in the school's institutional educational project, which must be materialized inside the classroom.

Cognitive neuroscience provides the knowledge it builds on the brain, provides information to understand what happens between the educator and the learner in the teaching-learning process, by studying the neural processes (which are the substrate of human cognitive processes), allows understanding the function of the various cortical and subcortical structures in the integration of perception, language, memory, visuospatial function, praxis, attention, executive function and decision making.

Cognitive neuroscience is relevant in education, since it is the neuroanatomical and functional support of cognitive processes, making it possible to understand these processes that occur in the teaching and learning of the educable subject. It is based on the principle that each male or female learner is different, therefore, they should be treated differently, each one has his or her own way of perceiving, understanding, feeling, processing, thinking, making decisions and acting. For optimal learning to take place, the following should be provided: an adequate, enriched environment that stimulates self-esteem, self-confidence, emotional adaptability due to the fact that there are connections between the emotional areas of the brain and the perceptive areas (Cotrufo, 2018; Izaguirre & Izaguirre, 2017).

Neuroscience provides new strategies to be taken into account in the processes of teachability and educability, it proposes a dialogue of knowledge between the sciences of education and cognitive neuroscience aimed at

providing answers regarding the structure and functioning of the brain to understand in depth the cognitive processes and behavior of human beings.

Under this perspective, neuroeducation, neuropedagogy and neurodidactics arise as a way of incorporating the knowledge produced about the brain from neuroscience into educational processes. Alonso (2018) states, that our brain has an enormous capacity for reorganization throughout life, there is much evidence that it adds neurons in adulthood and that, in parallel, it is modeled until the last of our days by learning, experience and the challenges to which we submit it, "the human brain is the most complex structure in the universe, so much so that it sets itself the challenge of understanding itself. The brain dictates all our mental activity from unconscious processes, such as breathing, to more elaborate philosophical thoughts" (Manes and Niro, 2019, p. 25).

Neuroeducation is a discipline of cognitive neuroscience that studies how the brain works in the processes of educability and teachability, is a new vision of training processes based on the brain, provides useful tools for teaching, achieving critical thinking in an increasingly abstract and symbolic world, seeks to evaluate and improve the preparation of the teacher, facilitates the process of who learns from individuality, allows the teacher to incorporate into his pedagogical work how the brain works, extracting knowledge of how to teach and learn better.

This whole process is studied by neuroeducation from two disciplines: neuropedagogy and neurodidactics, the first one invites to how to teach and learn better, and of course how to educate better.

Neuropedagogy is an emerging science whose object of study is the human brain as a biological and social organ capable of being modified by the processes of educability and teachability.

There cannot be a mind without a brain, nor a brain without a social and cultural context, it provides both biological and social foundations, the foundations are based on the principle of brain or neuronal plasticity, which refers to how the nervous system changes through interaction with the environment, i.e. the brain's ability to modify itself in response to environmental stimuli, creating and expanding neuronal connections, while eliminating connections that are not very active or inactive. Through brain plasticity we are able to modify habits or predetermined knowledge and learn new things (Sepulcre, 2018).

While learning occurs throughout life, the activity that occurs in the early years remains key. The first three years are fundamental to obtain the information that will serve us for our survival throughout life, and it is when the foundation of all sensory perception is formed, hence the importance of a good early childhood education in the area of social sciences for the development of social thinking.

Neurodidactics for its part, like all this emerging knowledge is a discipline of recent configuration, seeks the understanding of the aspects of neurodevelopment that influence learning, use this knowledge to create new methodologies in the classroom and optimize the teaching-learning process. Morales (2015) states that neurodidactics is the science that merges, on the one hand didactics and on the other hand neuroscience,

Paniagua (2013) argues that neurodidactics is a branch of pedagogy based on neuroscience, which gives a new orientation to education, its purpose is to design more efficient didactic and methodological strategies that promote greater brain development or greater learning in the terms that educators can interpret. Neurodidactics applies knowledge about how the brain works and how neurobiological processes intervene in learning. Neurodidactics is the practical convergence of the dialogue between neuroscience and didactics that provides strategies, resources and methodologies for the development of meaningful learning in the classroom; it is placing neuroscience at the service of education (Forés and Ligoiz, 2014).

The processes of teachability and educability of social sciences in early childhood education.

For others, this education should begin from the moment of conception. Its objective is the biological, cognitive, psychomotor and socio-affective development, in order to lay the foundations for the personal, social, cultural and autonomous development of this educable subject.

The purpose of early childhood education is to contribute to the physical, emotional, social and intellectual development of boys and girls, to progressively incorporate in them the elementary guidelines of coexistence, based on respect for differences, the development of affective capacities and democratic values that facilitate harmonious social interaction and the understanding of the physical and social characteristics of the environment where they grow and evolve.

To achieve these goals, the processes of educability and teachability that occur in the area of social sciences are fundamental, having special relevance for Latin America, the Colombian society that is living a historical stage called post-conflict, a historical period that develops after the signing of the agreements between the FARC-EP (Revolutionary Armed Forces of Colombia - People's Army) guerrillas and the Colombian state, which closes the page of more than fifty years of armed confrontation. This historical fact, makes necessary the construction of a new cultural ethos, in the perspective of a culture for peace, understood as:

A new system of values that favors coexistence in the midst of differences, that allows incorporating the other, to a shared social life, under his own conception of the world without reifying and alienating him; assuming him as an authentic human being who has rights and duties for the development of his human dignity (De la hoz, 2016b, p. 36).

An education for post-conflict that contributes to the construction of a culture of peace must be rooted in relevant educability and teachability processes that contribute to a culture of dialogue, non-discrimination, recognition of the other as a different subject expressed in ways of thinking, acting, conceiving the world, deciding, believing, discerning and dissenting in a different way, with rights and duties. Hence, early childhood education in this context is of supreme importance because it is at this stage of human development where the foundations of the archetype of the future citizen are laid, which undoubtedly must have different characteristics from the existing one, allowing a training away from dogmatism, intolerance, hatred and ignorance of the differences and rights of others.

The social sciences, due to their epistemic character, are called to play a fundamental role in this process, without losing sight of the fact that the construction of this culture of peace has a transversal character in the curriculum and is not only the responsibility of the school.

The social sciences study man in society, the phenomenon or social fact, it approaches the social reality to explain it, analyze it, interpret it, understand it or transform it, according to the epistemological edge that is adopted.

Social reality is made up of human groups, with all that they can contribute in terms of history, culture, rituals, traditions... material infrastructures built by man, production yields and the institutional systems that man has developed (political, economic, organizational). Social reality testifies to the way in which human societies organize and function to satisfy, first and foremost, the needs for food, shelter, health, education and work (Alderoqui et al., 1995, as cited in Siede, 2021).

Social reality is expressed in the interaction that occurs between human beings in a geographical space and in a historical time in order to build both material and immaterial goods in the search to satisfy their vital existence as a human species, it is the expression of the human condition of the real life of man, understood in the corporal, psychic and spiritual existence, in the total unity of the functions of his life, whether sexual, technical-economic, pedagogical, political, religious, artistic or of another kind.

The social sciences to approach this object of study, constitute the categories of: human interactions, geographic space and historical time. Categories that the human subject throughout his formation will gradually incorporate in each of the educational levels.

The notions of time, space and human interactions are not developed in the human being intuitively, they must be learned, they are constructions of the mind and the brain mediated by the social and cultural context in which the educable subject is incorporated. The intentionality of the didactics of social sciences in early childhood education to provoke significant learning has to be the development of observation and experimentation processes, it contributes to the social development of children in this sense, the processes of teachability and educability are intertwined with the context in which they grow and develop, it seeks that they know themselves, know and develop in their environment, become aware of their social environment and feel that they are part of it.

The teaching processes in the area of social sciences for infants must encourage the stimulation and development of mental operations and thinking skills that they will need throughout their lives to interpret, understand and address social problems, that from the argumentation, proposition and critical thinking, propose solutions and transformation to them. It is in early childhood education, where the child is stimulated and creates the basis for the development of operations and thinking skills necessary for the gradual incorporation of the categories of the social sciences.

To conceive the educable subject as a biopsychosociocultural being is to understand him as a multidimensional being of biological origin, where mind, society, brain and culture are interwoven to give him meaning, he is a situated being, for a meaningful learning and formation, the social sciences in the process of teachability and educability, puts in the center of the reflection How does the educable subject of early childhood learn the categories of the social sciences, from his biological, psychological, social, cerebral and cultural reality and what values are incorporated from this knowledge for the development of a social thought?

The answers to this question in dialogue with the characteristics given to the educable subject surpasses the theories that assume the learning process exclusively from the stimulus and development of the cognitive dimension, which, although necessary, is not the only one, in the same way the cultural context must be enriched and taken into account in the didactic action carried out by the teacher in the process of teachability and educability.

Therefore, the process of teachability of the constituent categories of social sciences in children's education, obtains sense and meaning when didactically and pedagogically it is assumed from the context in which the educable subject is inserted, a context that has been enriched with the linkage and incorporation in the global world to which children have access at a very early age. The mass media, the internet, social networks are present in the child's life, not taking into account this reality in the process of teachability and educability, is to disconnect the child from that vital world, of which he/she is a part.

But just as this global world permeates the child's life, there is also a local, familiar reality that directly becomes an obstacle or facilitator in the process of developing the operations and thinking skills necessary for the incorporation of the notions of geographic space, historical time and human interactions. "A social environment full of objects and questions will favor to a maximum degree the development of higher intellectual capacities. It is in such families and schools that children with superior intelligence come from" (de Zubiria, 1994, p. 40).

It should be noted that it is in early childhood education where the socialization of the human subject begins, the process of relationship and cooperation with others. It is essential that the school has as its main objective that the educable subject observes his/her environment, explores it actively, with the intention of building with him/her, the notions about some significant situations and facts, which generate interest so that his/her knowledge and participation as a human being throughout his/her existence is more fruitful.

Notional thinking is the stage of thinking of the human subject between the first year of life and six, where they develop intellectual forms of less complexity than the conceptual one. Children begin to know their environment through their senses, assimilate the different facts that happen around them, and manage to produce assertions based on the notions they have acquired. From the Piagetian theory, the understanding of space and time in infancy depends on the infants' own experiences, which would not be able to work with complex geographical elements (far from their immediate environment), nor with patrimonial elements because this implies a capacity for abstraction that they have not yet acquired at this stage.

With the penetration of the globalized world, understood as "a complex series of processes, not a single one that has nothing to do with what is "out there", remote and distant from the individual. It is also an 'in here' phenomenon, which influences the intimate and personal aspects of our lives" (Giddens, 2000, p. 25). Where there is massification and the inexhaustible development of technological means applied to telecommunications and cybernetics, which permeates the child's culture, ensures the maturation of mental operations in the notional stage, allowing us to affirm that children can perform much more complex processes than hitherto believed, in relation to space and historical time.

Therefore, the understanding of the category of space depends not only on the child's maturational state, but also on his or her experiences, cultural and environmental factors, among which is obviously the educational factor. It should be noted that the main trend in the design of school curricula at this stage has been to accept, more or less directly, more or less openly, that the student under six years of age is incapable of understanding time and space, and has acted in derivation to this conception, a premise that in our opinion must be overcome.

Currently, the spatial experience of students is not exclusively constituted by the space where they live. Children travel and may spend prolonged periods of time away from their usual residence, and they also have indirect spatial experiences through the media, the Internet, reading, etc. This means that the concept of environment today is not limited to what is geographically closest, it is proposed that all construction of spatial knowledge does not start from what is geographically closest to what is farthest away, but from simple spatial relationships to the most complex and significant for the child.

Teaching the category space in the child implies assuming it as something independent of his body, is to generate awareness that his body occupies a space, in which it can be oriented, that in that space there are other objects and subjects, likewise to teach the relative positions of objects in space, distances, intervals, as well as to penetrate the world of measurement and the schematization of space. Therefore, the learning of space is approached within early childhood education in a global and transversal way, attending jointly to all the aspects involved, from the knowledge of one's own body and the acquisition of laterality to the exploration of the environment and the representation of geometric shapes that allow expressing it graphically (Rivero & Alejandre, 2011).

The didactics of social sciences in early childhood education should promote processes of observation, identification and description of the child's living space together with the initiation and implementation of exercises that promote the development of language and a vocabulary that brings the child closer to a first description of that living space, field trips or pedagogical trips are a didactic strategy that can facilitate this process.

Field trips are the didactic strategy through which students build their learning in direct contact with the object of teaching, in the scenarios where the facts were developed or are being developed, through these activities the educable subject experiences and lives in a natural and direct way the teaching-learning process, the geographical spaces, the cultural and historical scenarios, become the classroom where the processes of social interaction are experienced

through economic activities, human expressions, the relationship man-environment, traditions, etc. (De la Hoz & Hard, 2017, p. 44).

Wass says (1992)

The great contribution of out-of-school activities is that they allow students to obtain a series of knowledge through observation, experience, manipulation and even direct verification that, in addition, can facilitate the expansion of specific skills and promote their personal development" (as cited in Miralles & Molina, 2011, p. 102).

According to Mora (2007) "a child does not start learning with abstract ideas, but with perceptions, emotions, sensations and movement, obtained from the sensory world and as a reaction to the real world, the primordial source of stimuli and the child's first teacher" (p. 60).

Regarding the category of time, studies carried out in Great Britain, Italy and Spain, allow us to affirm that children from the age of five possess an idea of duration and even a certain sense of history, which implies a revision of the student's capacity to understand the perception of time at an early age, the teaching of time is in harmony with the notion of movement, of change of what is now and not later, of that which was and is no longer or possibly will be something else.

The teaching of time, as well as space and human interactions, must start from the child's vital context, which has been enriched by the transformations that globalization has incorporated into the life of human beings. In this process, the local cultural characteristics that permeate the infant's life cannot be left aside; they become fundamental elements that the good teacher must take into account in his or her pedagogical and didactic action in order to de-systematize the teaching process. Similarly, in the didactic work of the teacher it is necessary to take into account how the brain works, the role it plays as an organ that receives stimuli from the environment and with which it elaborates the reality that surrounds us, thanks to the operating codes built in it over hundreds of millions of years. Reality refers to the construction, not only of the world we see, touch or smell, but also to the construction and elaboration of the societies in which we live and the norms and values that govern a specific society (Mora, 2007, p. 22).

4. CONCLUSION

Therefore, didactics as the pedagogical discipline that develops the processes of teachability prioritizes its work in the materialization of the goals, principles, aims and educational objectives indicated in the social agreements that guide the institutional educational projects.

In other words, placing the educable subject as the center and a being situated with multidimensional characteristics, what is taught, how it is taught and the tools or strategies used for this purpose, are subordinated to the type of society that is to be built and the type of man, woman, citizen who are or will be part of it.

The methods, strategies, contents, resources when they are instrumentalized lose sense, meaning, homogenize and reify the human subject. They acquire meaning when they cease to be magic formulas that are transferred from one context to another without taking into account the cultural, social and economic realities that respond to the educational needs of the educable subject.

Education, being a situated social fact, calls in the Colombian context to the construction of a culture of peace in the post-conflict and invites early childhood education and its teachers to be at the forefront of this process, since it is in the first years of human life where the processes of educability and teachability are developed, which will lay the foundations for the formation of future citizens. This culture of peace is built jointly with the whole society; it is within the school where these purposes are materialized in an intentional way with transversal curricula, which contribute to a social thinking in Colombian children in the perspective of building a nation project in peace.

It is necessary to deepen studies in neuropedagogy and neurodidactics about the processes of educability and teachability in children who have suffered the phenomenon of violence in Colombia, in order to identify at the classroom level the cultural, social, emotional and affective deprivations that affect the learning process. Today, it is undoubtedly necessary to advance in studies on how to awaken or stimulate curiosity, attention, conscience, emotions and creativity in the area of social sciences so that it becomes a knowledge that students like and structures the bases of social thinking in children that will help them throughout their lives to understand and be active subjects in the transformation of the world they inhabit.

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Edilberto Hard: conceptualización, análisis formal, investigación, metodología, administración del proyecto, recursos, software, supervisión, validación, visualización, escritura - preparación del borrador original, escritura - revisar & edición.

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