

# The appropriation of culture and psychological development: contributions of historical-cultural psychology for child education

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**ABSTRACT.** The present study has the goal of bringing awareness to some aspects of the constitution and psychological development as a historical process mediated by culture, understood as the historically elaborated set of material and non-material human production, and to reflect on its implications in early childhood education. The theoretical-methodological support on which we are based is historical-cultural psychology, with classical authors such as Vygotsky, Luria and Leontiev. The main focus of this study is the psychical developmental processes of young children, we will highlight the historical process of the human constitution of man, learning as a fundamental process for psychical development and educational activities as a necessary condition for the development of higher psychological functions.

**KEYWORDS**. Historical-Cultural Psychology, Development of Higher Psychological Functions, Early Childhood Education.

### La apropiación de la cultura y el desarrollo psicológico: contribuciones de la psicología histórico-cultural para la educación infantil

RESUMEN. El presente estudio tiene como finalidad traer a la conciencia algunos aspectos sobre la constitución y el desarrollo psicológico como un proceso histórico mediado por la cultura, entendida como el conjunto de la producción humana material y no material elaborado históricamente, y reflexionar sobre sus implicaciones para la educación infantil. El soporte teórico-metodológico en el cual nos fundamentamos está constituido por la psicología histórico-cultural, cuyos autores clásicos son Vigotski, Luria y Leontiev. El foco principal de este estudio está colocado en los procesos de desarrollo psíquico de niños pequeños. Colocamos especial énfasis en el proceso histórico de constitución de lo humano en el hombre, en el aprendizaje como proceso fundamental para el desarrollo psíquico y en la actividad educativa como condición necesaria para el desarrollo de las funciones psíquicas superiores.

**PALABRAS CLAVE**. Psicología Histórico-Cultural, Desarrollo de las Funciones Psicológicas Superiores, Educación Infantil.

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#### 1. INTRODUCTION

One of the great problems of contemporary pedagogy is find answers about the necessary conditions that organization of teaching in children's education, understood that at this stage of schooling, the higher psychological functions of the human race start to potentiate, since the relationships of teaching and learning.

As a researcher in the area of education and teacher training, I become active in the face of this problematic, since of mediation with theoretical and practical instruments for the elaboration of possible responses that may contribute to the broaden understanding about the teaching that promotes the development of the human psyche in the childhood. In this sense, I stress the need, in criticizing the true reality of national education, to present possible ways that teachers and researchers in the area can guide their practical activities (Bernardes, 2011) in the child education for such purpose.

In the exercise of my social function, I assume the historical-cultural approach as a theoretical-methodological reference that orient the exposure of text content, since it allows us to understand and explain the educational processes that impact the development of the human psyche, characteristic of historically constituted concrete subjects. Therefore understood since the principles of historical-dialectical materialism, as theoretical and methodological fundament. The constitution of the concrete subjects is understood as the synthesis of the movements of internalization and appropriation of the human cultural production, made possible of being accessed throughout life.

In this sense, it is possible to *root of the problem* to understand and explain individual differences, often explained by different theories with biologizing, environmentalists, behavioral or interactionist justifications. In the theoretical-methodological approach assumed in this article - that investigates the concrete reality from its objectifications, historically constituted, in order to dialectically transform the external and internal reality of the active subjects - the *root of the problem* of the individual differences emerges from the different possibilities of access and appropriation of the historically elaborated culture.

In contemporary society, organized by the principles of capitalism, access to human production, material and non-material, does not occur and cannot occur in a similar way on the part of all individuals composing it, since social and individual differences need to be justified and maintained on the basis of meritocracy and the competences of each subject, without questioning them based on the concrete conditions that pertain to their formation.

Once you are aware of the social and political dimension of the *root of the problem* here, we refer to the theoretical production of Historical Cultural Psychology as a mediation to return the explanations given to the problem in question. In this sense, it is understood that Vygotsky's attempt was to respond to the problem of the constitution process and to develop the human psyche considering the historical and cultural dimensions. In the movement to produce answers to this new problem in his time, the author aimed to produce a general psychology that explained the constitution and development of a new man who, dialectically, acted as subject in the movement of forming a new society, whose central principle is the equality of conditions to all the subjects that integrate it. Such problematic remains current and needs answers, since contemporary society continues in a constant movement of transformation.

Thus, the arguments defended in this article are based on the epistemological, gnosiological and logical basis identified as the Historical-Cultural Psychology that aims to explain the constituent processes and constituents of the singular subjects that must be the synthesis of the maximum possibilities for developing of the human kind, objectified through historically elaborated culture mediation.

It is understood that this generic subject - true man - must be understood in its totality, considering it as a social being (Marx, 1974) that integrates aspects in the form of unity, such as affectivity and intellect, what is logical and historical, cultural and social, reason and emotion. Therefore, it is considered that the study of the thesis in question is relevant to seek answers to childhood education aimed at developing the higher psychical functions of children from the first years of life.

Seeking to fulfill this need, this paper has the goal of bringing awareness for teachers and researchers about some aspects of the constitution and psychological development as a historical process mediated by culture, understood as the historically elaborated set of material and non-material human production, and to reflect on its implications in early childhood education.

In this attempt, this study presents a summary of the historical process of psychical development of young children, when the process of constitution of the human being in man will be emphasized, on learning as a fundamental process for psychical development and on the educational activity as a necessary condition for the development of higher psychological functions to occur.

#### 2. HUMAN DEVELOPMENT AS A HISTORICAL PROCESS

The constitution of the human race, according to Historical-Cultural Psychology, takes place from the social nature of man, as a cultural man who, in his constitution, comes from life in society, mediated by culture. Leontiev (1970), referring to the work of Engels, states that:

[...] supporting the idea of an animal origin of man, [Engels] showed at the same time that man is profoundly different from his animal ancestors and that hominization resulted from the transition to life in an organized society at the base of labor; that this passage changed man's nature and marked the beginning of a development which, unlike the development of animals, was and is subject not to biological laws but to socio-historical laws (p. 280).

Thus, the slow process of the constitution of man passes through gradual and non-linear stages, ranging from the stage of *biological preparation* to the stage *of passage* to the man defined by the fabrication of instruments and embryonic forms of work and society. At this stage, the formation of man is still subject to inherited biological laws. Through the influence of the development of labor (essentially human activity) and communication through language (symbolic instrument), socio-historical laws begin to manage the development of man as a human being integrated with society by culture. This stage is identified by Leontiev as the essential turning point. According to Leontiev (1970), "it is the moment in fact that the evolution of man is totally free from his initial dependence on the inevitably slow biological changes which are transmitted by heredity. Only the socio-historical laws will henceforth govern the evolution of man" (p. 281).

Vygotsky and Luria (1996), in the psychological essay on the study of the behavior of apes, primitive man and children, present the concept of human development, systematizing the path of evolution from ape to cultural man. In this study, the authors describe "three main lines in the development of behavior - evolutionary, historical and ontogenetic [...]" and demonstrate that "the behavior of cultural man is a product of these three lines of development and can only be understood, scientifically explained, by the analysis of three different paths that constitute the history of human behavior" (p. 51).

Thus, the process of hominization occurs in the face of man's need for subsistence, since he not only adapts to the environment, but, above all, he promotes transformations in the environment in which he lives, adapting it to meet his needs. Dialectically, such activity promotes changes in the constitution of man himself, developing motor skills, phonetic complexity and transforming the sense organs and human perception into "social" organs in their constitution.

This conception of the constitution of the human race is based on Marx (1974), who affirms that it is in social relations that the senses in general (sight, hearing, tasting, olfaction, touch), as well as thought, contemplation, and will establish themselves by giving rise to the social organs of the individuality of man, through the appropriation of objective reality. Thus, the social meaning of material and non-material objects is only appropriated by the heirs of culture through interpersonal relationships with other participants in society.

Vygotsky and Luria (1996) identify the historical process of the evolution of man through the critical stages that trigger changes in human development from the use of instruments, promoted by work and the use of psychological signs, and the appropriation of culture as the mode by which the ontological dimension in the subjects becomes possible.

In this sense, Shuare (1990), commenting on the social-historical origin of the human psyche in Vygotsky's work, states that the author "introduces time into psychology, or rather introduces the psychism in time" (p. 59).

In this historical perspective in which time is conceived as the vector that defines the essence of the human psyche, we assume the dimension of the constitution process of society and the subjects and their individualities. Both in the individual dimension and in the social dimension, human development is linked to human activity as a trigger for the critical stages of "turning points" in the process of transformation and evolution of man himself.

In the dimension, in which human time is considered history, the communication of the meanings present in the culture in general to the other subjects assumes a fundamental importance to understanding the physical and psychical changes in the "human being". In this sense, Leontiev (1970, p. 285) affirms "[...] that each individual learns to be a man. What nature gives you when you are born is not enough for you to live in society. It is still necessary to acquire what has been achieved in the course of the historical development of human society" (p. 285).

In the culture appropriation process, *mediation* is identified as a fundamental category for the understanding of human development. Such a conception implies identifying the importance of the mediation of culture through interpersonal relations in general and through the processes of schooling, especially when it is aimed at the emancipation of subjects.

The mediator function of the activity with signs and instruments through education in general is considered by Vygotsky (1989) as fundamental for psychical development, since the mediation of the signs, as an auxiliary element in the solution of problems, fundamentally changes all the psychological operations. On the other hand, the mediation of the instruments potentiates the constitution of the new psychological functions because they constitute means by which the external activity is directed.

Such mediated activity is considered the basis of the appropriation movement of objective reality, however, it is necessary to make explicit that sociality does not correspond to the direct influence of society on the formation of individuals, since by alienation this process occurs in a fragmented way, promoting the distance between what is proper to mankind and individuals.

The movement of appropriation of culture through educational processes highlights the relationship between learning and child development. We consider from the researches that we have realized that being aware of how concretely the relationship between psychic development and learning in general is relevant for the education professional to organize pedagogical actions that potentiate the psychic development of the subjects in general.

#### 3. LEARNING AND PSYCHOLOGICAL DEVELOPMENT

On the relation between psychological development and learning, Vygotsky (1994) critically analyzed the psychological theories of his time and proposed a new solution to the problem, starting with the idea that "*Learning begins well before school learning*" (p.109). According to the author, the relationship between learning and development is a dialectical and historical movement, because it argues that:

[...] learning is not in itself development, but a correct organization of children's learning, leads to mental development, activates a whole group of development processes, and this activation could not take place without learning. For this reason, learning is an intrinsically necessary and universal moment for the development of these unnatural but historically shaped human characteristics (Vygotsky, 1994, p. 115).

According to Vygotsky (1989, p. 83), human development implies the rejection of the commonly held view that cognitive development is the result of a gradual accumulation of isolated changes"; thus refusing the idea that the development of children's higher psychological functions can be investigated from the analysis of isolated elements. Conceptualizes development as:

[...] the complex dialectic process characterized by periodicity, inequality in the development of different functions, metamorphosis or qualitative transformation from one form to another, internal and external factors, and [as] adaptive processes that overcome the impediments that children encounter (Vygotsky, 1989, p. 83).

Vygotsky (2001a) proposes the indivisibility of the whole in parts as a type of analysis of human psychic development, arising from the understanding that such a process can only be analyzed from the unit, that is, from its totality, a fact that contemplates the relations between the logical and the historical, cultural and social, affection and cognition, and emotion and reason. It should be emphasized that "by unit, we understand the result of the analysis that, unlike the elements, comprises *all the fundamental properties characteristic of the set* and constitutes a living and indivisible part of the totality (p. 19).

Vygotsky (2001b,) states that "we believe that this unity can be found in the internal aspect of the word, in its meaning." (p. 20). The meaning of the word, when considered as a unit of analysis of the development of higher psychological functions, is internalized through education and learning in general. In school learning, meanings are understood as living concepts, which pass between spontaneous and scientific concepts.

Vygotsky (1989, 2001b) introduces in the analysis of the psychical phenomenon the concept of *Near development zone* - ZDP. This concept is presented by the author as the difference between the real development (what the child does alone) and the development possibilities created in the near development (what the child does with the help of others). Such a psychical phenomenon is present from the earliest days of a child's life, since learning and development are considered to be interrelated phenomena.

From the first stage of child development, children learn information related to family culture and the social aspects present in its context. Such knowledge internalized by intrapsychic relations becomes the intrapsychic dimension of the child, who in turn internally mediates future social relations through language.

Regarding the importance of the ZPD for children's intellectual development, Vygotsky (2001a,) states that: "[...] *The zone of proximal development has a more direct value for the dynamics of intellectual evolution and for the success of instruction than the present level of its development*" (p. 239).

Duarte (2001), when referring to the importance of the zone of proximal development for the educational process in the school context, states that:

It is the up to the school, therefore, the important task of transmitting to children the contents that are historically produced and socially necessary, selecting what is at each moment of the pedagogical process in the zone of proximal development. If the school content is beyond it, education will fail because children are still unable to appropriate that knowledge and the cognitive faculties corresponding to it. If, on the other hand, the school content is limited to requiring from children that which has already formed in their intellectual development, then teaching becomes useless, unnecessary, because children can carry out the appropriation of that content alone, and such appropriation will not produce any new intellectual capacity in the children, will not produce anything qualitatively new, but only a quantitative increase of the information they dominate (p. 98).

Thus, it is conceived to be based on the actual possibilities in the current development of children and the possible conditions created by the education in the zone of proximal development, which then becomes possible to transform child development. Education is understood as a fundamental activity for children to appropriate knowledge and human meanings in general.

With the awareness that the individual development occurs through the mediation of meanings of human production in interpersonal relationships, originating from human activities in general, it becomes fundamental to understand the influence of educational activities in the development of higher psychical functions.

## 4. THE EDUCATIONAL ACTIVITY AND THE DEVELOPMENT OF THE SUPERIOR PSYCHOLOGICAL FUNCTIONS

According to Davidov (1988), "[...] the essence of human activity can be discovered in the process of analyzing the content of interrelated concepts such as *work*, *social organization*, *universality*, *freedom*, *conscience*, *establishing purposes*, whose bearer is the generic subject" (p. 27).

In the specificity of the psychological dimension, Leontiev (1994) conceives the activity by what the process, as a whole, is directed (its object), always coinciding with the objective that stimulates the person to perform this activity, that is, the reason. He further states that activity must be understood as a molar system which means that at the psychological level, this unity is mediated by meanings of psychical reflexes, whose function is to guide the subject in the world of objects. The *molar system* constitutive of human activity is composed of basic units that are only identified separately for the purpose of analysis, nevertheless, the need to be understood in a unitary dimension as a whole is emphasized.

The basic units that structure *human activity*, according to Leontiev (1983), follows from the reason that impels the performance of the specific activity; after the establishment of the reason, the actions that are subordinated to the conscious goals arising from the mobilization of subjects, motives and human needs; finally, *the operations*, considered as the way of performing an action, are directly detached from the conditions for the performance of the concrete objective. The molar system formed by the "basic units" *activity - action - operation*, mediated by meanings and psychical reflex, and established by conscious and concrete goals, determines activity as conscious human action.

In understanding the *activity* as an instrument in human development, its details at each stage of development must be considered in order to understand the psychological constitution of individuals. Leontiev (1994), when analyzing the actions and operations that promote human

development, defines the dominant activity as the "activity whose development governs the most important changes in the psychical processes and in the psychological traits of the child's personality, at a certain stage of development" (p. 65).

The differentiation made by Leontiev (1994) to the dominance of the activity is established from the content of the activity itself. As children enlarge their relationships with the world through their experiences, the essence of the content of actions alters. When referring to the dominant activity in childhood, the author states that the type of activity is not characterized by the number of actions related at each age, but refers to the relationships in which the actions influence the psychical development and identifies three attributes that characterize the dominant activity.

The first refers to the fact that it is in the activity that other forms and types of activities emerge that make it up, that is, the dominant activity is composed of other activities that structure and shape it. Another attribute refers to the particular psychical processes that form or organize the dominant activity. The third attribute is related to the fact that the main changes in the child's personality depend on the activity performed by the child.

Leontiev (1994) indicates as dominant activity, in the period before formal schooling (called pre-school by him), *playing*, because such content assumes a prominent role among the other activities performed by young children. In the formal schooling phase, the author points out the relationships linked to the *study*, which assume a preponderant role in the development of children and young people. In the period in which the person is professionally active in society, work configures itself as the dominant activity.

Elkonin (1987) expands this classification by linking the dominant activity to the concept of crisis in the work of Vygotsky, also identified by the author as a guide activity, and identifies the main stages of child development as: a) in early childhood: group 1 - Baby emotional communication; Group 2 - Manipulative object activity; b) second childhood: group 1 - Role playing; Group 2-Study activity; c) adolescence: group 1 - Personal communication; Group 2 - Professional study activity. In the present study, in view of its object, an emphasis is given to the early stages of child development.

According to Elkonin (1987), the first two stages of child development, emotional communication of the baby and manipulative object activity, refer to the child's first contacts with life in society. The first identifies the process of communication between infants and adults in the first weeks of life up to about a year, and provides the basis for the formation of sensory-motor manipulation actions. In this period, emphasis is placed on the affective and emotional relationships made possible by contact with adults. The second period has as content the child's action on social objects, whose meanings are mediated in life in society by the educational process in general. In this second period, there is a determinant influence of language on the appropriation of the social meaning attributed to the objects.

In the "pre-school" period, the dominant activity is identified through play, when children internalize social relations by reproducing the actions performed by adults with the objects. This process occurs through the imitation of the actions observed in the interpersonal relationships and by the creation over them that occurs in a mediated way by the personal senses attributed to the actions by the child during activity. Play becomes the content of the dominant activity, not just an action within the activity in general that performs in different contexts.

Understanding play, as the content of the dominant activity of young children, part of the "Vygotskyan" conceptualization that the child develops, mainly, by means of play. Thus, playing and games are considered by Vygotsky (1989) as part of the activity that drives and determines the development of children. In play, children project beyond their daily behavior, they extend daily

relationships through illusory situations and imagination, providing their development from the intervention in the zone of proximal development. According to Vygotsky (1989: 117), "action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions and the formation of real life plans and volitional motivations - everything appears in the toy, which is thus, at the highest level of pre-school development".

According to the changes in the main activity, the transformations in the psychological development of the subjects are perceived, as identified by Leontiev (1994): a) *Changes in the psychological character of actions*; b) *Changes in the character of operations*; c) *Changes in psychophysiological functions*.

An example of *changes in the psychological character* of actions is the matter of the small child's language, which is structured in different ways, when they are to their parents, in a situation of play with friends or in situations of learning in the school context. The actions of communication through children's speech, in each case, assume different psychological characteristics. Such changes in the language of children enable changes in the development of the psyche because they generate learning possibilities that lead to a movement of transformation of their psychological constitution, from the interpersonal relationships of the dominant activity.

As to the changes in the nature of operations in the activity, an example refers to the fact that children are in the learning phase, in which they express the appropriation of concepts related to verbal and nominal agreements. When children structure the sentence properly, with their additions, they make use of previous actions that have become operations in the activity in question. To make adequate agreements of time, gender, number, and degree becomes an "automatic" action when children appropriate the mode of action by which communication occurs through formal language. The example demonstrates the typical transformation of an action into a conscious operation. This fact demonstrates changes in children's psychological development.

With regard to *changes in psychophysiological functions*, for Leontiev (1994), this is the last group of changes in the development of the psyche. They are identified as sensory, mnemonic, tonic, and other functions. All activities are based on psychophysiological functions, but are not established only in themselves. They form the basis of the sensations, emotional experiences, sensorial phenomena and memories that underlie the phenomenon of consciousness; however, it is in activity that consciousness is constituted.

An example of this phenomenon is the process of abstraction and generalization of colors by young children. The sensory function of color perception is appropriated by children in drawing, in painting, in the application of colors in situations that have their origin linked to the play activity. In this case, the dominant activity of children is play, however, as Leontiev ([1970?], P.311) states that in *the development of the psyche of the child*, "Certain psychic processes form and reorganize not directly in the dominant activity, but in other kinds of activities genetically linked to it."

According to Leontiev (1994), the development of sensations is linked to the development of the processes of oriented perception; this, in turn, is not constituted by simple mechanical entertainment or by means of formal exercises, but rather by actions in the reflexive activity over objects. Based on research developed by the author and collaborators, it was found that it is not in the game itself that children appropriate colors, but in the face of actions that lead them to use colors in the form of drawings related to the play activity. As children transform the activity linked to color perception, new relationships with the object are developed, promoting a quality change in the appropriation of the content. In view of the above example, Leontiev's statement (1970) emphasizes: "the development of the psychophysiological functions of children is usually linked to the general course of the development of their activity" (p. 328).

The shift from one stage of psychical development to another is promoted by actions in the dominant activity. However, such a change is made possible when the teaching actions enable the reorganization and transformation of mental operations while psychophysiological functions; this occurs when the teaching actions are organized with the intention of awakening new reasons for new learning to occur, since the psychical transformations do not occur naturally or spontaneously. Depending on the relationships that children establish with the world and with socio-historical knowledge, the children themselves may come to understand reality in a new level of complexity, an objectified fact in the constitution of its subjectivity.

About *the perception problem*, Vygotsky (1999, 2001a) conducted several experiments and identified that perception is directly related to the sense attributed by the subject to what is perceived in the objective world. The studies show that perception is a function that changes as a product of development and is not determined since the birth of the child. Another issue attributed to perception is that it relates to *categorical thinking*, a psychical function that develops according to the appropriation of historically elaborated knowledge.

Vygotsky (1999), when analyzing the perception in the development of children, considers that in the development there is a connection between the functions of perception and eidetic memory, forming a unique set, resulting in a fusion between the functions of visual thought and those of perception. This fusion *cannot separate* the perception of the object (its meaning) from the meaning of that object. The experiments carried out by the author show that a connection between language and perception arises and that the perception of children changes if language becomes part of the process; an example of this fact occurs when children verbalize what it was possible to perceive about the object, a fact or phenomenon, reorganizing the thought. At each new level of inter-functional connections, there are new connections between perception and other functions, producing important changes in the psyche, developing awareness of reality in its entirety.

The explanation of the functional connections present in the perception recalls the concept of a psychological system, or functional system, that attributes the connotation of integrality of the higher psychological functions, and not the identification of functions that, together with the others, constitute the complex constitution of the human mind.

The overcoming of perception about the world of objects through the experiences provided by cultural relationships is determinant in the process of development of perception as a higher psychical function. The function of being promoters of the constitution of the human psyche is attributed to the influence of education and relations with historically elaborated knowledge, in this case, the perception of objects and social meanings of objects in objective reality.

The *memory problem* in child psychological development, similar to the study of perception, assumes particular characteristics in the investigations carried out by Vygotsky, Luria and Leontiev. According to Vygotsky (1999), memory, as well as other psychic functions, already exists since the earliest age as an elementary function and with time it develops and becomes a higher function. The diversity of the results of the investigations into the different manifestations of memory at various ages makes it possible to deduce that the development of memory is a *complex and non-linear process*.

Luria comments on the results of research on the different ways of using memory performed with pre-school and school children and states that:

6-year-olds remember the material immediately, of course, while school-aged children have a number of techniques [methods - J.K.] [SIC] that they use to store the required material; the latter relates this new material to their previous experience, draws on the whole system of associations, sometimes takes notes, and so on. Any of these other

children generally have similar memories, but they use them in different ways: both have memory, but the older one knows how to use it. It is this transition from natural forms of memory to cultural forms that constitutes the development of memory from a child to an adult (Vygotsky & Luria, 1996, p. 186).

This difference pointed out by Luria on the use of memory relates to the type of main activity of children. In young children, the activity of play can be considered as the way in which they relate aspects of reality to the attribution of signs that identify the object. It is the relation between the memory and the language with the nominative function, in which they attribute a linguistic term to the object. However, this is a process that needs to be systematized in properly organized education so that transformations occur in the cross-functional system.

The transformation in memory use at pre-school age is explained by Vygotsky (1999).

In the first years of life, memory is one of the central psychical functions, around which all other functions are organized. The analysis shows that the thinking of young children is strongly determined by their memory. Their thinking is not at all the same as that of older children. For young children, to think is to remember, that is, they rely on their previous experience, in its variation. Never has thought had a high correlation with memory as at an early age, when it develops immediately due to it (p. 44).

The relationship between *thought and memory* in small children is immediate, that is, the concept of an object is not structured in a logical way, corresponding to the logical-historical structuring of the concept itself. The appropriation of the concepts in pre-school children occurs from the memory and the concreteness of the infantile thought, by its syncretic character that relies on memory.

The generalizations, present in both adults and children are different. In adults, the generalizations deal with the social meanings attributed to the facts and phenomena present in the objective reality elaborated from the logical-historical relations; in small *children*, *generalizations* rely entirely on memory. From this, we can deduce the importance of *experiences* provided in interpersonal relationships for the constitution and transformation of higher psychological functions.

Among the higher functions presented here - perception, memory, thought, language and generalizations - we must point out that the transformation of these functions occurs as a crossfunctional system, and it is not possible to separate them except for study. Even in this condition, the totality of the higher functions must contemplate the understanding of how the psychical development of children occurs so that teaching actions can be organized, which will become developers.

#### 5. SOME CONSIDERATIONS

What emerges from the theoretical reflections presented here is that the professional who acts in the education of young children need to be aware that the relations between the appropriation of culture and the development of the psyche does not occur spontaneously or naturally. In order for the higher psychic functions to be potentialized in the development process, there is a need to organize intentional and conscious teaching actions so that, through learning, the transformations in the interpersonal system of the human psyche are objectified.

Considering that the development of higher psychological functions occurs from the mediation of culture objectified in the signs and instruments elaborated historically, school education, as a historically established form of cultural mediation, requires specific conditions in the organiza-

tion of teaching in order to promote the development of awareness of what surrounds subjects about the complexity existing in concrete reality.

In our research on the organization of teaching and teacher training (Bernardes, 2009, 2011a, 2011b, 2012, 2014, 2015) we have found that the transformation of child psychism is enhanced when the teacher is aware of how human characteristics are objectified in each individual subject and we have identified some characteristics about the concrete conditions necessary for such objectifications to occur.

The complexity of the concrete conditions present in educational institutions in general has been the object of research in our research group - GEPESPP - LEDEP - when we critically analyze the ways of action of teachers and in-service training. The results of these researches demonstrate the general principles in the formation of teachers' conscience as the need to mediate theories that explain the condition of the concrete, historical subject formed by the mediation of culture. (Batistão, 2013; Assali, 2014; Hamada, 2015; Pereira, 2016; Freire, 2016) Such a condition is necessary for the reorganization of teaching that assumes the characteristics of a revolutionary praxis within the school. Other results highlight particular aspects of the reorganization of teaching in schools that refer to the orientations of State policies in the field of education, to school governance in its pedagogical and political aspects, to teacher training and to family and school relations.

These results show that the reorganization of teaching needs to be the synthesis of a collective process of study and be the objectification of the conscience of the active subjects, finding general and specific referrals to supply the needs of the school. We also verify that in the daily life of the schools, these conditions are rarely adequate for the collective activity (managers, teachers, employees and students) to be objectified in the transformation of the pedagogical praxis (Bernardes, 2012) and, consequently, to be potentiating the development of children's psyche.

The fact to be evidenced is that for school education to be considered as a potentializing activity for the development of children's psyche, there is a need for the teacher to be aware that this phenomenon will only occur from the pedagogical praxis organized in a conscious and intentional way, anchored in principles that explain the constitution of the concrete, historical and cultural human subject.

Thus, emerges the need to consider that in the training of teachers, the mediation of scientific and theoretical knowledge that creates the possibility of transformation of the teacher's consciousness regarding the real possibilities of teaching as a revolutionary praxis and its social function in the process of transformation of the objective and subjective reality.

When questioning the organization of education in children's education as a particularity of educational processes in general, we ask: How do you organize pedagogical practices that are potentiating child development? Good question... But the answer must be the objectification of the creative activity of education professionals in the face of the challenges and emerging needs of their school contexts.

However, any response that can be built on such an issue must take into account that "there is nothing more theoretical than good practice".

In the general scope of education and in view of the theoretical synthesis on the development of higher psychological functions presented in this study, the essence of the psychological characteristics of small children that needs to be contemplated in the education of children is highlighted.

*Playing* is the content of the dominant activity of young children, a fact that leads us to prioritize the experience in the context of play so that they come to compose teaching actions that promote

the development of thought, language, perception, memory, generalization and others. It is in play and by play that the elements of culture (art, science, philosophy and politics) need to be mediated and internalized by children in early childhood education. Thus, despite the many needs that emerge from the reality in early childhood education, it is considered fundamental that actions and operations in the activity of play are always present in the teaching of young children.

Good social practices must overcome the reiterative dimension, must be well grounded theoretically and consciously organized, while part of the creative activity that aims at the transformation of reality. The pedagogical practice is not different... the theoretical bases in the fields of psychology, sociology, didactics and teaching methodologies are fundamental to direct the organization of teaching that potentiates the psychical development of the active subjects.

It is the complexification present in our dominant activity, *the work of being a teacher*, the work of forming the heirs of human culture, humanizing them.

We deserve respect...

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