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## LEARNING IN THE ELDERLY: NEW PERSPECTIVES IN LIGHT OF OLD PARADIGMS

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## INTRODUCTION

This article analyzes learning and human development based on aspects considered relevant in the works of Lev Vygotsky and Jean Piaget, making a brief comparison between the original thinking of these authors and the interaction with the act of learning in old age, in light of the aging process, as well as the pedagogical implications that encompass these approaches.

In this scenario, it is postulated that human development can be compared to a line that we follow throughout our lives, in which the journey encompasses not only the biological development of the individual, but also other aspects such as social, cognitive, and affective development. It is a field of study that scientifically analyzes how people change and also how they remain the same from conception to death, that is, the reflection of transformation and human development itself.

From this perspective, anchored in the initial questions intertwined in studies with children and from the aforementioned authors, namely: how does the subject learn? How does the individual learn? We seek to reflect on the following concern: how do older people learn?

At this juncture, the text presents a brief description of the life and work of the respective educational theorists and, consequently, considerations about what it means to learn, linking them to the act of learning in old age. Let us continue.

## PSYCHOGENETIC THEORIES – VYGOTSKY, PIAGET, AND WALLON – SOME REFLECTIONS

### VYGOTSKY

Vygotsky was born in 1896 in Belarus and died in 1934 at a very young age, before reaching 38, from tuberculosis. He graduated in Law, Psychology, History, Literature,

Philosophy, and Medicine (COELHO; PISONI, 2012). His works remained unknown until the 1960s and were published by his friend, a fact that may have altered the original text by adding his own ideas on the subject. Other theorists such as Piaget and Wallon also studied how children learn, each in a different geographical location and without knowing each other. However, as Vygotsky died at an early age, this was probably the reason why his studies did not include stages of development and learning, as presented by other theorists.

According to Rabello and Passos (2010), the author's main works known in Brazil are "The Social Formation of the Mind," "Psychology and Pedagogy," "Language, Development, and Learning," "The Construction of Thought and Language," "Theory and Method in Psychology," and "Pedagogical Psychology."

Vygotsky devoted himself to the study of learning and language disorders and defended the relationship between development and learning, arguing that these processes are intertwined, with one depending on the other. Children develop through socialization based on learning, environments, and practices that foster this learning. In this case, school should be one of these environments for learning, where children will have experiences with their surroundings and with their peers, thereby developing and learning. Teachers play a unique role in this process, as they need to mediate for this learning to occur, with the aim of helping children relate to the world.

Not only for Vygotsky, but also for Piaget and Wallon, learning and development are essential requirements in the educational process of human beings. Furthermore, many studies have been developed by these authors, each of whom has promoted their own theory, with differences and similarities in their ideas.

Life and education go hand in hand for the continuous development of the individual. Due to different realities, education functions

as a mechanism, something individual that each person brings with them according to their daily experience, according to their interaction with the environment in which they live. It is at school that learning stimulates development, playing an effective and productive role in psychological construction (Vygotsky, 2008).

The development of the individual is the basis for Vygotsky's theory. He considers that the interaction of the subject with the environment is essential for the acquisition of knowledge, hence the reason for his theory being interactionist. With his studies on human characteristics, the author in question states that these are not present from the moment a child is born, nor are they merely the result of external pressures. He goes further, saying that "they are the result of the relationship between man and society, because when man transforms the environment in t to meet his basic needs, he transforms himself" (COELHO; PISONI, 2012).

The environment is a fundamental and intrinsic factor in human development because, according to Vygotsky, it is through social interaction with this environment that people can learn and develop. Based on the social interactionist approach, in which a person's development occurs through exchange with others and with the environment in which they are inserted, this interaction with the environment is called mediation.

Through this lens, the author sought to understand the genesis, origin, and development of psychological processes, which are developed according to the elements of the genetic approach. Learning allows internal processes to be awakened, which occurs through human contact with the world. He calls the human being's capacity to develop an organic apparatus, a characteristic unique to the species. Language, memory, cognition,

consciousness, human feelings, everything is related to learning. The context of the individual is fundamental to the constitution of psychological functions.

Vygotsky was against the innatist view, which says that people are born with predetermined characteristics, and also against empiricism, which argues that people are born as blank slates and are shaped by their experiences. He created a third concept, the socio-interactionist view. For him, individuals are not born ready, nor are they copies of their external environment. He believes that the more learning there is, the greater the development, and that people only learn when information makes sense to them; there is no point in trying to teach children more than they are capable of learning. It is through learning from others that knowledge is constantly formulated.

In order to further his theory of development and learning, Vygotsky classified it into three zones, which are called the stages of learning: the zone of potential development, the zone of actual development, and the zone of proximal development. Each zone characterizes a moment in the subject's development within their history. For this to occur, the author posits that contact and interaction with the environment is essential, that is, it is necessary for the child to relate to other people and be immersed in different environments and cultures so that there is a mutual exchange of knowledge.

### **ACTUAL DEVELOPMENT ZONE**

This zone is considered the starting point for the child's learning process, as it is at this stage that everything the child is already capable of doing on their own, without any help or instruction from others, is taken into account. Therefore, it refers to knowledge that has already been acquired.

## POTENTIAL DEVELOPMENT ZONE

At this point, Vygotsky points out that this is the stage where everything that the child has not yet mastered should be considered, but which, nevertheless, they are expected to be able to do on their own. In other words, there is a balance between everything they already do independently and everything they are expected to be able to do.

## PROXIMAL DEVELOPMENT ZONE

“The Proximal Development Zone defines those functions that have not yet matured but are in the process of maturing, functions that will mature but are currently in an embryonic state” (Vygotsky. 1984, p. 97). It is at this point that the influence of other individuals is seen as a key factor in the construction of development. It includes everything that the child is able to put into practice only with the support of others. This is when the teacher is seen as essential, enabling advances in knowledge that have not yet been awakened.

It is in this zone of proximal development that learning will occur. The role of a school educator, for example, would then be to promote this learning, serving as a mediator between the child and the world. As previously highlighted, it is at the heart of interactions within the collective, in relationships with others, that children will be able to build their own psychological structures (Creche Fiocruz, 2004).

As for school instruction, Vygotsky's emphasis on the importance of systematic teaching for human development stemmed from his recognition of the role and relevance of school for the advancement of society as a whole, since it is in and through the appropriation of the content conveyed there that humans become conscious, critical subjects and agents of history. “The process of school education is qualitatively different from the process of education in a broad sense.

At school, children are faced with a particular task: to understand the foundations of scientific studies, that is, a system of scientific concepts.” (Vygotsky, 1984, p. 147).

Vygotsky did not finish his conception of human development, but he offered a reflection as a basis for research, aspects of human development and learning, using Marxist principles as a parameter, with the aim of promoting the idea that human development occurs through social relations, history, and the culture in which the individual is inserted, that is, it occurs from the outside in.

Vygotsky divided the stages of development into three periods: i) early childhood (0 to 3 years); ii) childhood (3 to 10 years) and iii) adolescence (10 to 17 years). These ages are approximate, as the social context, history, and culture in which the individual is embedded will intensify, delay, or reverse their development.

For Vygotsky, children already have two ways of being formed, as they are related to each other. What Vygotsky tries to find out is about the child's development and how far their capacity goes at that point. Some tests are carried out to find out what the child knows or does not know according to their maturity for learning. Understanding the subject is necessary to understand what they already know, what they do not know, and their perspective on what they can learn, which is fundamental in the field of education.

## VYGOTSKY AND EDUCATION

Vygotsky makes significant contributions to education. According to Rabello and Passos (2010), these contributions help us to “reflect on the processes of formation of typically human psychological characteristics.” According to the authors, reflecting on this issue helps to raise questions and guidelines for the formulation of a pedagogical plan. Oliveira (2014) emphasizes this idea and adds

that these contributions have helped transform the “archaic view” that many educators have, thus contributing to the learning process of individuals. Among these points, Tavares et al. (2016) highlight social interaction, language as a cultural tool, the importance of cultural resources in the environment, and teacher-student interaction.

For Vygotsky, learning is intrinsically linked to development, being acquired throughout life through individual and collective experience, through life in society and in the school environment (OLIVEIRA, 2014). He values the school environment because it provides students with the possibility of developing specific ways of thinking and makes it possible to organize known formal thoughts. Once interaction with this knowledge occurs, the individual who receives it is transformed, as this knowledge produces new ways of thinking in the student. The author also argues that concepts, which he calls scientific, are acquired in the education of individuals and provide them with new views on reality, which end up spreading the knowledge acquired and transforming their “cognitive relationship with the world” (REGO, 2013).

The articulation between school education and different types of knowledge is also a contribution that Vygotsky promotes, considering it essential that other types of knowledge be valued so that there is a meaningful exchange between individuals and the object of knowledge, enabling teaching to be effective for both learners and teachers (OLIVEIRA, 2014).

The social and cultural context is deeply linked to this issue in terms of its connection with learning. It is important to improve knowledge of these tools and, according to Tavares et al. (2016), Vygotsky reports that teachers play an important role in this, as they are the ones who give students “access to new resources, in addition to teaching them.”

As already mentioned, Vygotsky's contributions to education highlight the importance of teacher-student interaction, and it is important that teachers are aware of their students' abilities and limitations so that they can help them progress and develop. This interaction is also important between students, family members, and between different types of thinking. For Vygotsky, the support that teachers give to students in the learning process is necessary, as well as the use of resources that are distributed to students, such as cultural tools, because, according to the author, these attitudes favor the learning process (TAVARES et. al, 2016).

According to Oliveira (2014), Vygotsky's ideas remain relevant and are very similar to the current objectives of educating students in a comprehensive manner, which ultimately leads to the need to enrich the environment in which these students learn, so that the education of these students “is not a rigid practice as it was in traditional schools, where teaching was based on memorization.” Finally, Vygotsky considers that there is no ready and predictable development, as we are always changing and so is the knowledge we receive, because we receive information every day.

## JEAN PIAGET

Jean Piaget was a researcher of children's cognitive and moral development. His theory is widely used in education and in understanding the stages of intelligence and learning. He specialized in evolutionary psychology and also in the study of genetic epistemology. His studies revolutionized education by overturning several traditional views and theories related to learning.

For Piaget, intelligence is the structure of an organism's adaptation to a new situation and, as such, implies the continuous construction of new structures. This adaptation refers to the external world, like all biological adaptation.



In this way, individuals develop intellectually from exercises and stimuli offered by their surrounding environment. Human intelligence can also be exercised by seeking to improve one's potential (FERRACIOLI, 1999).

For scholars, behavior is not innate, nor is it the result of conditioning. It is built through interaction between the environment and the individual. This epistemological theory is characterized as interactionist. The intelligence of the individual, as an adaptation to new situations, is linked to the complexity of this interaction between the individual and the environment. The more complex this interaction, the more "intelligent" the individual will be (PÁDUA, 2009). "There is no structure without genesis, nor genesis without structure" (Piaget). His theory shows that individuals only receive certain knowledge if they are prepared to receive it. In other words, if they can act on the object of knowledge to insert it into a system of relationships. There is no new knowledge without the organism already having prior knowledge to assimilate and transform it.

The construction of intelligence therefore takes place in successive stages, with increasing complexity, linked to one another. Piaget divided motor, verbal, and mental development into stages, which are: sensorimotor, preoperational, concrete operational, and formal operational. Piaget believes that the stages represent a logic of intelligence that will be surpassed by another stage of knowledge. The stages are seen from the perspective that intelligence takes leaps and changes in quality, and each stage represents a quality of that intelligence. This means that all children necessarily go through these stages and none of them can be skipped.

#### **a) Sensory-motor stage (0 to 2 years)**

It was once thought that children between the ages of 0 and 2 did not show any significant intellectual development and that

this only began with language. For Piaget, this stage of development is extremely rich, with intelligence beginning to show itself long before language. From 0 to 24 months, babies show a series of achievements, almost on a daily basis. When children begin to speak, around the age of 2, it is because they have something to say, because they have managed to construct a world of objects and rules before that. This is one of the main points in Piaget's theory, his contribution to the understanding of human development (CARVALHO, 2006).

The absence of semiotic function is the main characteristic of this period. Intelligence works through perceptions (symbolic) and actions (motor) through the movements of the body itself. It is an eminently practical intelligence. Their language goes from repeating syllables to words and phrases. Their social behavior during this period is one of isolation and differentiation (the world is them). According to Carvalho (2006), this first stage, sensorimotor, is understood to be between 0 and 2 years of age and is also called practical intelligence, because it is a stage of child development where children do not use language, but only their actions and perceptions. For Piaget, these first two years of life are absolutely essential because children undergo a complex evolution of great magnitude for their development.

According to Carvalho (2006), in order to acquire certain skills, some concepts are essential, such as the concept of an object: according to Piaget's theory, children are born without a clear understanding of the existence of objects and that they themselves are objects among other objects. Therefore, they need to construct the notion of an object. In this construction, there is a phase called permanent object, in which, even though they cannot see it, children know that it still exists, that is, they attribute existence to the object, even though it is outside their field of vision.

This happens around 9 months of age, leading to a qualitative leap in intelligence, because at first children only believe in what is within their field of vision.

Another important concept for understanding the sensorimotor stage is causality. At first, children imagine that they are in control of the world and that everything revolves around them, that things happen as if by magic. Little by little, children understand that the universe has laws, rules, and movements that transcend their personal desires and that these rules apply to them as well.

#### **b) Preoperational stage (2 to 7 years)**

This stage, also known as intuitive thinking, is fundamental to a child's development. At this stage, children are actively developing language, which will enable them to use practical language. Children are already able to form symbolic schemas and act in a logical and coherent manner. However, in terms of their understanding of reality, children are still somewhat distant due to the absence of conceptual schemas. Despite this, children already use intelligence and thinking, even if they are unable to perform operations. This is organized through three processes: assimilation, accommodation, and adaptation (CARVALHO, 2006). At this stage, according to Piaget, children are already able to represent their experiences and their reality. To this end, we will explain some signifiers that, according to the author, help children at this stage:

a) play: For Piaget, the most important type of play that only occurs during this period is symbolic play, that is, it is the moment that children use to develop their capacity for assimilation. This is because construction games become symbolic games. An example is when children "play pretend" and build a house, for example. However, for adults, that construction is "anything but a house."

b) At around two years of age, children begin to organize and associate events in their reality with language. Initially, they begin to talk to themselves, since their thinking is not yet organized during this period.

c) Drawing: This stage represents the most creative and diverse phase of childhood. At this point, initially at two years of age, children only make marks and their drawings have no meaning. However, at three years of age, children begin to attribute meaning to their drawings, making horizontal and vertical lines, spirals, and circles. But it is only at the age of four that children truly develop their creativity and begin to better understand their drawings and transfer their reality and feelings into their drawings, also using assimilation during this period.

d) Language: During this period, language begins to be more egocentric, that is, language is centered on the child itself. Children have difficulty distinguishing between the social and the personal. The term egocentrism is a striking feature of preoperational thinking widely used by Piaget. However, the author replaces it with the term decentration. Children learn intuitively at this stage, making free associations, fantasizing, and assigning unique and logical meanings. Example: Experiment with a glass of water for children;

e) Image and Thought: At this stage, image construction is the basis for thought. Thought exists because there is an image.

According to Carvalho (2006), Piaget distinguishes two substages in the period between 2 and 7 years of age: intuitive thinking and preconceptual thinking. Intuitive thinking emerges from the age of 4, when children are able to solve some problems in a certain way, but this thinking is irreversible. This is because children are not yet able to understand the differences between real transformations and what they resemble. Pre-conceptual thinking is magical thinking, where wishes come true

and has some characteristics, such as animism. There is also realism and finalism: marked by the relationship between cause and finality, and artificialism: parents begin to explain natural phenomena as if they were produced by human beings. It should be noted that children who are actively engaged with their environment develop their learning in a more creative and original way.

### **c) Concrete operational stage (7 to 11 years)**

The concrete operational stage is marked by important intellectual acquisitions and corresponds to the beginning of school age. In this phase, reality will be structured by reason, and logical thinking will develop due to the acquired ability to form conceptual schemas. The level of concrete operations begins around 7-8 years of age, when children begin to rely on transformations of reality through internalized and grouped actions and systems that are reversible and coherent (e.g., gathering and dissociating). According to Carvalho (2006), for Piaget, children consolidate the conservation of quantity, construct the concept of number, and begin to construct concepts through logical structures. Operations are internalizable and reversible actions coordinated in systems of sets. They are common to all individuals of the same mental level and intervene in private reasoning and cognitive exchanges that consist of gathering information, relating it, and introducing reciprocities, which generates the construction of operations equal to those that each subject uses for themselves.

At this stage, children are able to establish relationships and coordinate different points of view, integrating them in a logical and coherent manner. They demonstrate an ability to internalize actions and organize them logically; in other words, they begin to perform mental operations. They also have a sense of time, space, speed, and order. However,

children are only able to perform operations based on their everyday experiences or things that relate to their lives; they are dependent on reality (CARVALHO, 2006). Individual concentration, when the subject works alone, and effective collaboration when there is communal life are signs of progress in children of this age group. From the point of view of interindividual relationships, children become capable of cooperating because they no longer confuse their own point of view with that of others. Egocentric language disappears almost entirely, and children's spontaneous purposes testify to the need for connection between ideas and logical justification. There are changes in social attitudes and transformations in individual action, so the child becomes susceptible to the beginning of reflection, thinking before acting.

The essential thing is that the child begins to free himself from his social and intellectual egocentrism, becoming capable of new coordination that will be important for his intelligence and affective development. For intelligence, it is the beginning of logical construction, which constitutes the system of relationships that allows the coordination of points of view. For affectivity, the same system of social and individual coordination produces a morality of cooperation and personal autonomy. This new system of values represents, in the affective field, the equivalent of logic for intelligence. The mental instruments that will allow this dual coordination, logical and moral, are constituted by operation in relation to intelligence and by will in the affective plane. The great achievements of thought thus transformed are those of time (with it, speed and space), causality, and notions of conservation as general schemes of thought and no longer simply as schemes of action or intuition (CARVALHO, 2006).



According to Piaget, it is during this period that affectivity, will, and moral feelings also develop. To the extent that cooperation between individuals coordinates points of view in a reciprocity that ensures both autonomy and cohesion, and as the grouping of intellectual operations places the various intuitive points of view in a reversible set, affectivity is characterized by the emergence of new moral feelings and an organization of the will that leads to better integration of the self and regulation of affective life (CARVALHO, 2006).

The first moral feelings originated from the child's unilateral respect for adults, and this respect establishes the formation of a morality of obedience or heteronomy. The new feeling that intervenes as a result of cooperation between children and the forms of social life that arise from it consists essentially of mutual respect, which exists when equivalent personal value is attributed to each other. Mutual appreciation follows sooner or later, as there is mutual respect in every friendship based on esteem and which excludes authority.

According to Carvalho (2006), mutual respect leads to new forms of moral feelings in accordance with everyone's commitment, leading to moral feelings such as honesty and companionship. The affective consequence of mutual respect is the feeling of justice. Children in this age group support the idea of distributive justice, based on equality, and retributive justice, which takes into account the intentions and circumstances of each individual rather than the objectivity of their actions. Honesty, a sense of justice, and reciprocity constitute a rational system of personal values. Morality as the coordination of values is comparable to a logical grouping, but it must be admitted that interindividual feelings give rise to various kinds of operations. At first glance, it seems that emotional life is purely intuitive and that its spontaneity

excludes anything reminiscent of an operation of the intellect.

According to Carvalho (2006), as feelings become organized, regulations are established whose form of equilibrium is the will, which is the affective equivalent of the operations of reason. The will is a function that appears late, and its actual exercise is linked to the functioning of autonomous moral feelings. The will is a regulation of energy; it is useless when there is already a firm and single intention, and appears when there are conflicts of tendencies or intentions, such as when one oscillates between a tempting pleasure and a duty. In this conflict, there is always a lower tendency that is stronger in itself (the desired pleasure) and a higher tendency, but at the moment more fragile (the duty). The act of will consists not in following the lower and stronger tendency, but on the contrary, in reinforcing the higher and weaker tendency.

All fundamental feelings linked to an individual's activity translate into energy regulation. It is enough for a child to be interested in a task to find the strength necessary to undertake it. The system of interests or values, which changes according to the activity in progress, directs the system of internal energies thanks to an almost automatic and continuous regulation. But this is only an intuitive regulation, since it is partly irreversible and subject to frequent shifts in balance. Will, on the other hand, is simply a regulation that has become reversible and is therefore comparable to an operation. It is natural for will to develop during the same period as intellectual operations, while moral values are organized into autonomous systems comparable to logical groupings (CARVALHO, 2006).

#### **d) Formal operational stage (12 years onwards)**

In this phase, children, expanding on the abilities acquired in the previous phase, are

already able to reason about hypotheses to the extent that they are capable of forming abstract conceptual schemes and, through them, performing mental operations within the principles of formal logic. With this, as Rappaport points out, children acquire “the ability to criticize social systems and propose new codes of conduct: they discuss their parents’ moral values and construct their own (thus acquiring autonomy).”

According to Piaget’s theory, upon reaching this stage, individuals acquire their final form of equilibrium, that is, they achieve the intellectual standard that will persist throughout adulthood. This does not mean that there is a stagnation of cognitive functions after the peak reached in adolescence. As Rappaport emphasizes, this will be the predominant form of reasoning used by adults. Their further development will consist of an expansion of the “r knowledge, both in breadth and depth, but not in the acquisition of new modes of mental functioning.”

We should question Rappaport’s previous considerations based on the following reflection: research results have indicated that “low-literate/low-educated” adults have a cognitive functioning mode “guided by information from perceptual data, concrete context, and personal experience” (Oliveira, 2001). According to Piaget’s theory, such adults would therefore be in the concrete operational stage, i.e., they would not yet have reached the final stage of development that characterizes adult functioning (formal logical). How could such adults (concrete operational) still acquire the conditions to broaden and deepen their knowledge (formal logical) if, according to the respective theory, they are not capable of developing “new modes of mental functioning”? - Moreover, according to the theory, wouldn’t the ability to develop decontextualized thinking depend on the development of the cognitive structure?

## THE ETHICAL DIMENSION IN PIAGET’S WORK

In the midst of this debate, it should be noted that, for Piaget, there is a development of morality that occurs in stages, according to the stages of human development (1977 apud La Taille 1992:21), namely: “all morality consists of a system of rules, and the essence of all morality must be sought in the respect that the individual acquires for these rules.” The author understands that in collective games, interindividual relationships are governed by norms which, although culturally inherited, can be modified by consensus among the players, and that the duty to ‘respect’ them implies morality because it involves issues of justice and honesty.

According to Ferracioli (1999), Jean Piaget studied children up to twelve years of age and distinguished moral development into:

**Anomie** – this phase coincides with the egocentric phase of childhood. At this stage, there are no rules, and basic needs are based on organic needs that determine the norms of conduct. As children grow, they come to understand that the “world” has its rules. They also discover this through playing with older children, which is useful in helping them enter the next stage, heteronomy.

**Heteronomy** – duties are seen by the child as external and coercive, not as obligations developed by the conscience. Good is seen as compliance with order, and what is right is observed by the rule that cannot be disobeyed or relativized by flexible interpretations. The person obeys the norms for fear of punishment. In the absence of authority, disorder occurs.

**Autonomy** – at this stage, individuals acquire moral awareness. Duties are fulfilled with an awareness of their necessity and an understanding of their meaning. At this stage, individuals have well-formed ethical and moral principles. In the absence of authority, they continue to behave in the same way. They

are responsible, self-disciplined, and fair.

Parents and educators should help children move out of the anomie that is natural in the early years and gradually enter into heteronomy, moving smoothly toward their own ethical and intellectual autonomy, which is the ultimate goal of moral development. Cooperation is based on dialogue, which creates an environment of mutual respect. An environment of fear, authoritarianism, and unilateral respect tends to perpetuate heteronomy. From the initial anomie, or lack of norms, children gradually broaden their worldview and realize that they are part of a larger whole. Little by little, they learn to cooperate, respect, and love their neighbors (FERRACIOLI, 1999).

For Piaget, morality itself presupposes intelligence, given that the relationship between morality and intelligence has the same logic attributed to the relationship between intelligence and language. In other words, intelligence is a necessary condition, but not sufficient for the development of morality. In this sense, morality implies thinking rationally in three dimensions: a) rules: which are concrete, explicit verbal formulations (such as the Ten Commandments, for example); b) principles: which represent the spirit of the rules (love one another, for example); c) values: which provide answers to duties and the meaning of life, allowing us to understand where the principles of the rules to be followed are derived from.

Thus, interindividual relationships that are governed by rules involve, in turn, relationships of coercion—which corresponds to the notion of duty—and cooperation—which presupposes the notion of coordination between two or more subjects, involving not only the notion of ‘duty’ but also that of ‘wanting’ to do something. We see, therefore, that one of the peculiarities of the Piagetian model is that the role of interindividual

relationships in the evolutionary process of man is focused from the perspective of ethics (La Taille, 1992). This implies understanding that “cognitive development is a necessary condition for the full exercise of cooperation, but not a sufficient condition, since an ethical stance must complete the picture.”

## **THE VIEW OF THE ELDERLY: THINKING ABOUT MACRO PROPOSALS AND THE PORTRAIT OF THE FEDERAL DISTRICT**

Based on the understanding that any and all educational courses and/or spaces aimed at the elderly should be, above all, centered on and built with the elderly, from their perspective and real needs, embodied in a macro reality, but also looking at the micro context, the theories presented above can be related to the educational process linked to the elderly. In this direction, some topics that should be addressed are: Aging with physical and mental health. Education. Geriatric studies and connections. Gerontology, from the perspective of aging. Physical and mental activities for body and mind. How to deal with old age and defend oneself against loneliness. The issue of mental health, especially in the current situation, is quite significant, both in universities and in schools in general.

The teaching-learning relationship in the context of aging.

Many other topics are also related to this topic: from the issue of social ostracism and/or social isolation; to family life (or lack thereof); to the worldview that older people have, the respect they have for their place in the world, and the way they interact (or do not interact) in various social circles; loneliness, the reduction and loss of human respect; issues of violence in which this group is involved (as victims) in various spheres, among many other points of equal importance. Simone de Beauvoir, in her

work *The Coming of Old Age*, already pointed to the inhumane, sometimes abandonment-like treatment of the elderly.

In this scenario, the following data, extracted from the Epidemiological Bulletin, which deals extensively with violence in the life cycle of older people in the Federal District, <https://www.saude.df.gov.br/wp-conteudo/uploads/2017/11/Boletim-Epidemiologico-de-Pessoa-Idosa-2021.pdf>, organized by the Subsecretariat for Health Surveillance (SVS), through the Center for Studies, Prevention, and Care for Violence (Nepav), with the objective of profiling old age in the Federal District. At this level, the Federal District, in 2020, had a population of 3,052,546 (three million fifty-two thousand five hundred and forty-six) people. The number of elderly people (over 60 years of age) is 346,221 (three hundred and forty-six thousand, two hundred and twenty-one) citizens, which is equivalent to 11.3% (eleven point three percent) of the general population.

Regarding the distribution of the elderly population by gender, 52.2% (fifty-two point two percent) are female and 47.8% (forty-seven point eight percent) are male, as shown in the excerpt below:

The distribution of the elderly population by gender shows 52.2% female and 47.8% male. By race/color, there is a predominance of brown/black with 57.6%, 40.9% white, 1.2% yellow, and 0.3% indigenous. In terms of education, 2.3% are illiterate, 18.4% have incomplete elementary education, 4% have completed elementary education, 5.2% have incomplete secondary education, 29.3% have completed secondary education, 6.7% have incomplete higher education, and 33.9% have completed higher education (Bulletin, 2021, p. 3).

Thus, given this scenario, a unique question emerges: what is the role of education in the face of aging?

Thinking about this process is urgent in many different areas of education. It involves embracing knowledge and encouraging autonomy in individuals, making them more productive and active, with a view to improving their quality of life and satisfaction throughout this process. It is about keeping an open and lively mind for multidisciplinary learning, for the awakening of the new; through learning, seeking human development in the context of the most diverse transformations and possibilities, establishing it in the space of the world, which they themselves will discover or build, with the aim of inserting or reinserting the old into society.

Thinking about the role of education is a broad and refined concept, requiring a broad and accurate space, based, for example, on **intergenerationality**, which is important for the community as a whole: both for the elderly and for young people. because this coexistence, the experience between different generations, makes significant contributions to everyone, such as strengthening emotional and more human bonds between the parties involved, with greater otherness, respect, empathy, and tolerance regarding the value of the elderly in today's society.

In this sense, the role of diverse knowledge, experience, the exchange of knowledge, the construction of new knowledge, the valorization of collective memory, popular knowledge, experiences, culture, values and principles, history and History itself, the encounter of different times, past, present and the perspective of the new, the future, the realization or even the development of new technologies and new perspectives, stands out.

In addition, it is also worth highlighting the breaking of taboos and prejudices, or even the lack of knowledge about the act of aging, which can occur through constant dialogue and interaction between generations.



All of this, through intergenerationality, by combining learning to learn (or knowing) with learning to do (practice), imbued with curiosity, fostering the role of the protagonist, who takes ownership of themselves, their dreams, projects, perspectives, desires, and becomes increasingly more human, more conscious, but owner of their ideas and reflections, of their autonomy. At this level, it is necessary to build a culture that values intergenerationality. Thinking about the educational process that contemplates this perspective is necessary and urgent.

### **THE ROLE OF EDUCATION FOR THE ELDERLY: EVERYONE CAN LEARN**

The role of education for older people must be inclusive. It is not enough to simply think about inclusion; it must be lived and put into practice at all times, as something that applies on a daily basis: when thinking about their various problems (or challenges) in order to better understand them and seek solutions in a supportive and collective manner, with regard to their social and economic demands.

With regard to aging and education in general, older people are offered activities related to social groups, leisure activities, continuing education courses, or open universities. However, the issue is much broader. The country is aging rapidly, and the social space of the university in relation to the elderly must be rethought, or even the social space of the elderly in relation to the university must be analyzed. We are or will be elderly as civil servants, teachers, managers, and, why not, as students. How can we work on this issue? How can we interact with teaching or even the practice of aging?

It is essential to include teaching on this topic in school curricula, undergraduate and postgraduate courses, based on a voice that needs to be heard, that of the elderly themselves.

The topic is complex, given that education has numerous roles in relation to aging, such as fostering, promoting, enabling, and/or expanding the capacities and skills of older people, with the aim of stimulating their potential, promoting their human and social development, and contributing to their awareness of their social responsibilities and rights. by encompassing the acquisition of new knowledge and skills that help in the elaboration, construction, and experience of an old age that contemplates their physical, psychological, and social well-being, meeting the educational demands of this group. It is also marked by a plurality of experiences, as Beauvoir points out ( ).

In the midst of this debate, it is emphasized that the role of education is to unveil the phenomenon by bringing together the different elements that surround it, such as historical, social, cultural, economic, and health aspects, seeking to overcome the different forms of discrimination, prejudice, and devaluation within society. In other words, to contribute to a critical and conscious view of reality.

Therefore, cultural maturity is needed in the way we understand, experience, or construct (or even deconstruct) what aging is as an educational act, through the understanding that aging is an educational act and that, under adverse conditions, we learn how cruel and inhuman society can be, devaluing the legacy, experience, and wisdom that only time can provide. But when recognized, this educational act becomes a reference, a leading role, living history, and quality of life, and these elements certainly constitute education. Therefore, it is only possible to understand aging in relation to education as interdependent categories; otherwise, it is finitude.

Education is intrinsically linked to aging; they are interdependent and serve as instruments for promoting knowledge and skills that enable individuals to better adapt



to the aging process and old age, constituting an important and significant experience in the context of learning and education itself, in the most diverse areas and stages of life, when viewing aging as a process and old age as an important stage of life.

The act of learning to age and all its nuances is one of the greatest challenges facing humanity, highlighting issues related to health, social relations, and the cognitive abilities of older people, among others, including the need to break down barriers and paradigms regarding the aging process and, often, the very negative view of what aging is, which is a daily stage in human development, peculiar to the act of living, the course of life, and its natural cycle.

At this level, it should be noted that, unfortunately and as a rule, there is a high level of prejudice behind the aging process and old age. Adults do not recognize themselves as old (I am not old, the other person is), and, worse, they continually want to dictate rules and norms for the old, for being old, and for how to do it.

Thus, it is necessary for teachers to stimulate, instigate, and rescue the intellectual autonomy and pluralism of ideas of students (the elderly), always being able to overcome the barriers of difference, diversity, adversity, and face the difficulties intrinsic to their performance. They face the challenge of becoming effective, efficient, and, above all, more humane social actors through the implementation of a solid and specific process: the continuing education of their students and themselves, as well as the acquisition of the knowledge necessary for high-quality performance.

In this field, many questions and concerns arise: the first one already anticipated in this text: what is the role of education? What are the pillars of education for the elderly? What knowledge is necessary for quality education in the context of the elderly?

Thinking about education, in this tangle of issues and the education of the elderly itself, means understanding it as an important instrument of social transformation and an excellent strategy for change. It is a space for welcoming, for sensitive and profound listening, a space for breaking paradigms, for breaking social marginalization, for removing alienation and opening up possibilities. Exactly that, the possibility of! The ability to think of oneself as capable, apt, able to believe, to dream, to leave the underworld of the cave and enter the world of light, social emancipation, intellectual autonomy, and full citizenship.

It is about moving away from the generic, static dictionary definition: the art of learning and teaching. And, increasingly, it is taking on a living and dynamic form, as a space for social repair, of society and for society itself, by allowing children, young people, and the elderly the possibility of learning to write their own names and, consequently, through the opportunity to change stories or simply replicate them in a vicious circle that repeats itself continuously. Or a virtuous circle, which is totally different, which reshapes, modifies, transforms, and allows people to change their destiny, their path, their story, and History itself.

In practice, it is about becoming a subject of the world through reading words and reading the world (Freire, 2018). A subject who thinks about their social context, the universe in which they are embedded, the other, the space of the other. The complexity of this space, of the subject that composes it, and of the relationships outlined there. A protagonist subject, as a full, conscious citizen.

Protagonism achieved through the possibility of! coming from education. Only from education, which brings about a critical-reflective reflection on the role of education, as a right or privilege, in a place marked by

such striking social ills as Brazil. This brings to the fore the role of public universities, the university or school we want, the one we have and the one we can have, the veiled utopia that sometimes inflames the hearts and souls of educators in their search for an ideal school.

Which, in the words of Carlos Drummond de Andrade, in his poem *Para Sara, Raquel, Lia e para todas as crianças* (For Sara, Raquel, Lia, and all children), would be the construction of a school that cultivates the broad capacity to learn, to create, to recreate; the capacity for research, restlessness, doubt, novelty, discovery, and experimentation. A school that teaches values, but above all fosters principles such as love, respect, sustainability, that embraces nature, the importance of history, language, and intergenerationality. A school that teaches free, critical-reflective, responsible thinking through the use of concrete, interdisciplinary subjects. An institution that leaves behind the world of mere memorization and learns to understand, discern, think with others, for others, beyond others, that knows not only how to process information and data, but how to transform them into knowledge. And, more than that, into wisdom.

Wisdom that comes from diverse knowledge, formal and informal, from the diverse worlds and readings of individuals, understanding that there is no greater or better knowledge, but rather different types of knowledge. A school that trains teachers with fragrant souls, with sensitive listening skills, welcoming, committed to education, to the pedagogy of teaching, to affection, to total otherness, seeing others through their eyes.

This premise is in constant dialogue with the understanding and vision of Paulo Freire (2018) regarding this creative possibility and the role of the school, viewing the student as a producer of their own knowledge. After all, “teaching is not transferring knowledge, but

creating the possibilities for its production or construction” (p.24). This is a continuous act of teaching and learning, learning and teaching, critically thinking about our current practice and context, with a view to future improvements. In a school that is made up of people, a school that works to create friendships and build healthy relationships, that embraces the most diverse types of people and their social roles. A school (or university) that is not an island: lonely, isolated, separated, and that interacts with the most diverse environments and scenarios. A school made up of people. That’s right, people! Social subjects, active subjects, conscious subjects, who work, study, grow, age, and are happy.

Therefore, in this universe of possibilities, one of the conclusions that can be reached is that quality education is intrinsically linked to the way in which this school (or university) is constituted and, in the background, to continuing education, the exchange of experiences and best practices, always thinking about how to seek effective solutions to the most diverse demands of students. In the case of this research, by identifying the weak points and areas for improvement in the educational process that can and should be improved in this space, the educational institution itself, the school, the university, and the pillars of education that underpin it.

## **THE FOUR PILLARS OF EDUCATION AND THEIR RELATIONSHIP WITH EDUCATION FOR THE ELDERLY**

Education is marked as the possibility of! This possibility is so readily articulated with the four pillars of education and the social function of education, its paths, and challenges. Furthermore, one of the greatest challenges for education will be the absolute and effective transmission of information and communication adapted to the cognitive civilization, particularly if we consider that

they are the foundations of the skills and competencies of the future, or even of the present. Thus, it is the role of education, but not only education, to set the tone and highlight the references that prevent people from becoming isolated in their educational process, or even the University (the school) itself from becoming isolated in this context, due to the excess of information and data that invade the public spaces of teaching and learning. And, in turn, by being able to provide guidance so that students can autonomously build their own educational paths and itineraries for the development of both collective and individual projects.

Thus, according to Delors (2012), thinking about lifelong education encompasses four pillars, fundamental columns for this process, which are intertwined with human life in all its phases, its development, and its relationship with education, which are broadly interconnected in the cognitive and practical spheres.

It is inconceivable to think about the educational process and education at all ages or stages of life, particularly for the elderly, without highlighting these pillars. Against this backdrop, the question arises: what is the mission of education?

It has a central function, which is to teach: i) how to learn (knowledge); ii) how to do; iii) how to live together; and iv) how to be.

Thinking about the first of these, learning to learn, means having the conviction that it is necessary to acquire tools of understanding in order to be able to interpret the world. It is about seeking tools, techniques, knowledge from books, codified knowledge, and mastery of the tools of knowledge themselves. It is a foundation, a path, with the aim of enabling the individual to learn to discover, to read the world around them, stimulating and working on their capacity for understanding, knowledge, discovery, construction, research,

and unveiling through curiosity, fostering their critical- r reflective sense, their autonomy, and their pluralism of ideas, added to their ability to discern this space, enabling them to make their own decisions and conclusions.

At the heart of this process are the roles of memory, attention, and thinking, as well as methods such as inductive and deductive reasoning, among others.

The second pillar, in turn, is marked by the ability to learn to do, the combination of theory and practice, the ability to take formal knowledge from books and put it at the service of reality.

An example of this is someone who has a cake recipe in their hands that looks beautiful and delicious, but when they bake the cake, it doesn't impress anyone because it has no flavor, no taste, and nothing appealing about it. Or even the student who, while studying in books, acquired the knowledge of how to give an injection or collect blood, but when doing so, cannot find the patient's vein and has to puncture them several times. Or even the teacher who, despite studying many teaching methods and techniques, is unable to teach in an engaging and interesting way that students can understand, despite having many certificates and courses. In short, theory without practice often fails.

In everyday life, this represents the ability to bring theory and practice into harmony. It means enabling individuals to enter the workplace and the social practice in which they are inserted through the acquisition of techniques and tools, but above all, through learning how to use them.

Learning to do is the construction, appropriation, and mastery of how. Understanding this becomes essential in the context of education, for the training of students and, above all, the elderly, since they are people who have their own culture. Therefore, the role of the teacher is of fundamental importance in the process of insertion or reinsertion into this academic space.

Older people have already had a space for learning in their lives, whether formal or informal, so they need to learn how to learn, that is, to know, to appropriate new or old learning from a new perspective, and also how to use this new knowledge in their life context, based on the premise of making choices, presenting proposals and solutions to problems, dealing with uncertainties, developing new skills, attitudes, values, etc.

In this regard, Paulo Freire (2018) posits that it is essential to:

- base oneself on the reality of the learner, taking into account their experiences, opinions, and life history.
- This data must be organized by the educator so that the content prepared for the classes, the methodology, and the material used are compatible and appropriate to the present realities.
- It is important that adults or older people understand what is being taught and know how to apply the content learned in their lives, through awareness of reality, in a dialogical and dialectical way, by discussing their practice, their work, the local and national reality, their family life, among other things, analyzing and acting on their practice.

Designing an education for older adults, in particular, implies being aware of some essential points, namely:

- they need to know the “why” behind content and learning;
- they have a great facility for learning through experience;
- their view and perception of learning is intertwined with their problem-solving ability;
- they are motivated to learn, and this motivation is greater when it stems from internal factors (their own individual needs) and if the content to

be learned has immediate application;

- older people are not only learners, they are teachers, as they bring a wealth of experience that can contribute to their own learning and that of the whole group, including teachers.
- From a Freirian perspective (2018), this means mastering certain assumptions, namely:
  - working with everyday life, concrete pedagogy;
  - adults or older people must want to learn (motivation, what is this for?);
  - adults or older people will only want to learn what they feel they need to learn (objectivity and rationality);
  - adults learn by doing (the importance of practice, learning to do);
  - the education of adults or older people focuses on problems, and the problems must be realistic (use of case studies, examples);
  - experience counts in adult or elderly learning;
  - adults or older people learn better in an informal situation;
  - adults want guidance (not a recipe), they want to know the possibilities for the path to be taken, but the training itinerary is individual;
  - adults or older people start from recognizing that problems exist, with the aim of collectively building possible solutions;
  - adults or older people are fundamentally concerned with becoming aware in a wide range of areas, especially with regard to their ability to say no, including to things they do not want to learn;
- Adults and older people need to understand that we are and are part of an educational institution: the role of education, therefore, is that of educators.



The third pillar is learning to live together, the ability to coexist, to live with, to live alongside others. In the current situation, this is certainly a unique challenge, something to be achieved as social beings, the human ability to humanize oneself, with others, for others, starting with others. This is especially true considering the high rates of violence that surround today's society. This is a pillar that transcends the classroom, the university campus, and is a challenge for life.

Have human beings learned to live with each other? What does this really mean in practice? If this were the case, it seems that we would not have so much vain prejudice, racism, xenophobia, femicide, and the number of reports of violence and mistreatment of the elderly in Brazil would not be so high, if they existed at all.

In this vein, education emerges as a central backdrop for the discovery of oneself and others, with a view to the collective, respecting the individuality of each person, but above all, the collectivity, based on common projects, and perhaps the greatest of these, learning to live together on this planet called Earth, from the most intimate family space to the community, school, or university, and to the most diverse landscapes.

In this scenario, learning to live together is a lifelong challenge, putting oneself in the other's place, seeing the other through the other's eyes, with otherness, empathy, mutual respect, understanding that there are conflicts, but it is possible to build passive solutions that promote peace, harmony, and human understanding, with a view to living together peacefully and being better people, a more just, egalitarian, and inclusive society.

Then emerges the fourth pillar, learning to be. Education has the fundamental mission of teaching the individual to be! It can contribute greatly to the development of critical-reflective individuals who connect with the world in the midst of their maturity and question this interaction and its respective relationships.

This premise permeates the ability to think

of human beings as multifaceted individuals with bodies, souls, spirits, meaning, ethics, aesthetics, feelings, multiple intelligences, and cognitive, social, functional, and personal abilities. Thus, the fourth pillar emerges as the possibility for humans to create and recreate themselves, becoming protagonists of their choices and decisions in the context of human development as multifaceted beings.

## FINAL CONSIDERATIONS

Piaget's theories open up a field of study not only for developmental psychology, but also for sociology, pedagogy, and other sciences, in addition to allowing professionals in these fields to develop methodologies based on his contributions. For Piaget, organisms adapt to their environment as they are stimulated by it. Therefore, individuals develop intellectually from the stimuli offered by their surrounding environment. For this reason, Piaget defends the principle that human intelligence can be exercised in pursuit of improving potential. In the field of education, his theories had a major impact and helped in the process of a new pedagogical structure that takes into account the experiences that students bring with them and adapts to the knowledge relevant to the period experienced by the child. According to Piaget, behavior is constructed and interconnected with the complexity of the interaction between the environment and the individual.

In view of all these considerations, Piaget also believes that cognition and affectivity are inseparable. Therefore, he considers it of great importance for educators (parents, teachers, and professionals committed to teaching) to take responsibility not only for the development of cognitive aspects, but also for affective aspects, without disregarding, of course, other dimensions such as moral and social aspects. For Piaget, an innovative methodology is essential in learning spaces, where educators are committed to guiding their students in pursuit of autonomous learning.



## REFERENCES

- CARVALHO, S. P. Crescimento da criança segundo Piaget. Es Sec. Fafe, 2006.
- DE LA TAILLE.; OLIVEIRA.; DANTAS. Piaget-Vygotsky-Wallon. Ed. Summus, 1992.
- FERRACIOLI, L. Aprendizagem, desenvolvimento e conhecimento na obra de Jean Piaget: uma análise do processo de ensino-aprendizagem em Ciências. R. bras. Est. pedag., Brasília, v. 80, n. 194, p. 5-18, jan./abr. 1999.
- PÁDUA, G. L. D. A epistemologia genética de Jean Piaget. Rev. FACEVV, número 2, p. 22-35, 2009.
- DO CARMO, Enedina Silva; BOER, Noemi. **Aprendizagem e desenvolvimento na perspectiva interacionista de Piaget, Vygotsky e Wallon.** Vygotsky, Lev Semenovich. “**Pensamento e linguagem.**” (2008).
- ZANELLA, A.V.. **Zona de desenvolvimento proximal: análise teórica de um conceito em algumas situações variadas.** Revista Temas em Psicologia, São Paulo/SP, n.2, p. 97-110, 1994.
- RABELLO, Elaine Teixeira; PASSOS, José Silveira . **Vygotsky e o desenvolvimento humano.** Portal Brasileiro de Análise Transacional, [www.josesilveira.com](http://www.josesilveira.com).
- SILVA.A.L.S.**Teoria de Aprendizagem de Vygotsky**, São Paulo, 2004
- MOREIRA, Marco Antônio; Teorias de Aprendizagens, EPU, São Paulo, 1995VIEIRA, Kassius Otoni; DA SILVA, Rodrigo Luciano Reis; MANTOVANI, Harley Juliano. **O DESENVOLVIMENTO E O APRENDIZADO EM VIGOTSKY.**