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## Pedagogical Considerations for a Critical Understanding of School Learning: A Perspective from the Context of the School itself

Carlos Eliecer Vocar Rubio<sup>1</sup>

### Abstract

*The present research aims at developing a critical and authentic pedagogical understanding of school learning. It stems from the understanding that the nature of learning and how it occurs in the school context has direct implications on the design, organization and implementation of teaching. Learning is conceived not as a product, an activity or a specific content, but as a process consciously directed to the selection/appropriation of social culture. In the same way, it defines the transforming potential of learning, both of the subject who learns and of the reality in which he/she acts. Methodologically, it is based on the qualitative epistemology of Fernando González Rey, defining knowledge as a constructive-interpretative production that occurs in the relationship between the researcher, the protagonists and the practice itself, highlighting the meaning of singularity as a legitimate level of production of pedagogical scientific knowledge. The study considered three complementary lines of work: critical analysis of more than a hundred published works on learning; exhaustive analysis of all the official documents that define the Chilean normative framework; and implementation of a co-constructive process, which summoned more than a hundred teachers, managers and assisting professionals from different regions of the country. This research seeks to contribute to the design of a theoretical model of school learning, which allows correcting conceptual errors, as well as the biased orientations that emanate from the central level regarding school learning.*

**Keywords:** School Learning, School Learning Factors, Scientific Knowledge and Pedagogical Considerations.

### Introduction

This research is born from the observation of a profound contradiction, evidenced in the official educational discourse, regarding the true nature of school learning. This contradiction is manifested between the declaration of principles, defined by the national regulatory framework, which defines the existence, in Chile, of an education and, therefore, a teaching, focused on the learning of all students; versus, the understandings that are formulated about it, which end up reducing it to the activities of teaching, to its final products and/or to its diverse contents.

From a theoretical perspective, this research has its origin in the approaches of Heredia, Y. and Sánchez, A (2013) when they argue that "epistemological understandings of learning affect the position that teachers have on teaching". In the same way, it is based on the understandings of Ertmer, P. and Newby, T. (1993) who established that only a good theory of learning can offer the basis for the selection and design of an intelligent and reasoned teaching strategy. Finally, we also share the definitions of Pérez, A. (1992) who states that "the concept of learning is a prior component, an indispensable requirement for any theoretical elaboration on teaching".

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<sup>1</sup> Universidad Andrés Bello Académico de la Dirección de Educación Continua y Proyectos Educativos, Email: [cvocar@gmail.com](mailto:cvocar@gmail.com), ORCID: <https://orcid.org/0009-0002-8541-9128>.



From this perspective, it is assumed that human learning in general and, specifically, school learning, constitutes the main pedagogical challenge for teachers in our country. But it is also assumed that, given the social demands and political and institutional demands for educational quality, of diverse contexts of personal and social development of each student, school learning constitutes one of the most complex challenges of the school system, and it is, in addition, despite the large number of studies on the subject, about which there are the greatest number of erroneous understandings from the perspective of the official educational discourse. In this sense, this research seeks to become a valuable contribution to the process of configuring an authentic and national theoretical model on the true identity of school learning.

In this context, it is necessary to establish that the present research is not referred to the definition of general learning, but seeks to establish the pedagogical foundations and principles that allow us to understand the true nature of school learning. In other words, its object of study does not correspond to any learning that can actually take place in the school space, but to that which derives from the curricular intentions formalized in the school's pedagogical projects, as well as in the planning of the various subjects, which constitute its curricula.

From a methodological perspective, the general objective of this research is the development of a critical and authentic pedagogical understanding of school learning, which questions the traditional and restrictive definitions held by the active educational system, as well as the explanatory models, often decontextualized, supported by various theories of learning.

According to its purpose, this study can be classified as a research with both theoretical and practical aspects, that is, it not only seeks to establish new understandings and interpretations about the object of study; but seeks to contribute to its development, from the optimization and innovation of a teaching truly focused on school learning.

From an epistemological point of view, this study seeks not only to describe and explain the structural-functional components of the school learning process, but also to achieve a high-level understanding, to interpret them and, in this perspective, define the direction of their new development, since it is assumed that the ultimate goal of pedagogical scientific knowledge is educational change. Likewise, the principles of qualitative epistemology proposed by Pinto, C. (2011) -synthesizing the conception of Fernando González Rey- are considered relevant: first, knowledge is a constructive-interpretative production; that is, it occurs in the relationship between the researcher, the protagonists and the practice itself. Second, the interactive nature of knowledge production in the human sciences. And third, the meaning of singularity as a legitimate level of knowledge production.

Based on these understandings of qualitative epistemology, the methodology of this study is described from the integration of three essential lines of work:

The first consists of a critical analysis of more than a hundred published works on learning, among which authors such as: Koffka, K. (1922), Vygotsky, L. (1934), Gagné, R. (1975), Ardila, R. (1979), Shuell, T. (1986), Bower, G and Hilgard, E. (1989), Tapia, A. (1991), Burón, J. (1994), González, F. (1995), Bermúdez, R. (1996), Pozo, J. (1996), Álvarez, C. (1997), Alvar, A. (2001), Castellanos, D. et al (2002), Zilberstein and Portela (2002), Rico, P. (2002), Rodríguez, L. (2003), Schunk, D. (2012), Soubal, S. (2013), Di Girolamo, C. et al (2013), Pérez, A. (2019), among others of considerable contributions.

The second line of work consists of the exhaustive analysis of all the official documents that define the regulatory framework of Chilean education (laws, decrees, frameworks, curricular

bases, study programs, etc.) in order to question the conceptions of learning sustained.

The third lies in the implementation of a reflective, participatory, critical and co-constructive process of pedagogical dialogue, carried out between 2021 and 2022, which brought together more than a hundred classroom teachers, directors, educators, education assistant professionals and academics from various regions of the country. This process of reflection was carried out through the techniques of Focus Groups. Its main function was to filter the information collected, validate and give legitimacy to the theoretical, methodological and practical foundations, as well as ensure the relevance of each of the conclusions drawn.

This research presents as a scientific result, a set of pedagogical considerations on school learning, which aim to reveal the true identity of this process. Pedagogical considerations are conceived as a system of knowledge, which are the product of a process of systematization, understood as a method of science, and which acquire identity as precisions, recommendations, estimates or scientific judgments that are issued on the nature of a phenomenon/process or on the relationships that it sustains.

## **Development**

### **Critical Contributions Regarding Erroneous Understandings of School Learning.**

The first line of reflection of this article is based, on the one hand, on the propositions of Pérez, A. (1992), in the sense that the definitions contained in learning theories constitute partial and restricted approximations that "hardly constitute an integrated body of knowledge capable of explaining the global meaning of the complex phenomena that occur in school learning". The same author argues, in this regard, that the requirements and challenges of educational modernization require a "more complete and integral explanatory body" as a way to enable a true transition, from an education centered on information, to an education centered on knowledge and wisdom. Providing educational institutions with this interpretive/explanatory framework is, without a doubt, a challenge for the pedagogical and curricular management of the school.

On the other hand, these first considerations arise, from the very findings of the research process, when noticing that in most of the official documents that emanate from the central level, as well as in various articles written by prominent researchers and academics, even from the teaching understandings themselves evidenced in this research process, a "restricted" vision of school learning is promoted, reducing it to the active reproduction of content (knowledge), to a programmed sequence of activities (means/procedures), to a final creative elaboration (product), to the processing and/or assimilation of information (traditional knowledge), and even, in the General Education Law, it is limited to the education process itself. This translates, without a doubt, into the predominance of erroneous understandings about this pedagogical category and, therefore, in the prevalence of rote teaching designs, reproductive and schooling that contribute very little to integral human development and, to a lesser extent, to the formation of their personality.

The first thing that is postulated in this article is that education should not be defined as "the process of lifelong learning that encompasses the different stages of people's lives..." (Law No. 20370 Mineduc, Chile, 2009), at first, because education should be understood as "a more complex and integral social phenomenon" (Valera, O. 2012); as a process with historical and cultural characteristics that "enables the continuous improvement of the personality of the human being" (Soubal, S. 2012). In other words, it should be conceived as a "system of influences"

(Blanco, A. 1997), which seeks to become "a decisive factor in integral human development" (Vigotsky, L. 2004). The problem with this erroneous understanding is that it generates a double problem: on the one hand, there is a kind of invisibility of the most essential nature of education as a social phenomenon, reducing it, in this way, to the merely instructive process that is generated in the classroom. Álvarez de Zayas, C. (1992) warned us in this regard that "the worst mistake that educational institutions can make is to confuse instruction with education". On the other hand, learning is limited to rote and reproductive processes, typical of educational instruction. In the same way, "lifelong learning" is reduced to an external process, mediated by the school organization, thus ignoring its character as an essential quality of people. More specifically, lifelong learning is a human quality, not a school educational process.

In this same perspective, school learning cannot be limited to the simple mechanical reproduction of contents, as programmed knowledge. The very idea of "learning by rote", in a restrictive way, is not correct. Although the important role that memory plays in the learning process should be valued, the truth is that the latter is an even more complex psychic phenomenon. In no way, a student can learn, in the strict sense of the word, without attributing meaning to the content of what he learns or, mechanically applying something, without understanding what is being said or done. On the contrary, as Soubal, S. and Ferreira, M. (2013) argue, school learning is a process that leads us to development, learning is developing, it is growing sustainably. As the authors define, learning requires "wanting", the source of the desire to learn comprehensively lies in our emotions, in our will, in our decisions. School learning is a conscious and intentional process, individual and social, that leads us to development.

Following the same line of analysis, learning should not be circumscribed to an activity or an integrated sequence of procedures, nor to an artificially organized process, understood as what the student does in school, to assimilate the knowledge determined by the curricular design. From this perspective, concepts such as "learning activities", "learning techniques", "learning materials", and even "learning styles" that flood the curricular bases and study programs, must be reconsidered; because, in essence, they always refer to teaching, or in some cases, to the process of constructing knowledge. However, the truth is that learning occurs within the framework of any activity, practice or educational experience. Moreover, the activity represents the stage in which knowledge is produced and, subsequently, learning, as will be discussed later. It is in experience where the necessary unity of the cognitive and the affective occurs, which constitute the most essential basis for the development of the student's personality (González, D. et al 2006).

In the same way, this article argues that school learning should not be understood as a product, a result or evidence of what students assimilated, acquired or elaborated in the context of classroom activities. This statement can only be valid, in understandings that reduce school learning to the contents of teaching. Learning, in essence, translates into a process of cultural appropriation, which, by its nature, is not transmitted or transferred. The problem is not only linguistic, that is, it could be "not so incorrect" to call the contents or products of teaching "learning"; there is a deeper reason for this fundamental questioning, namely, that focusing the action of teachers on ensuring these "minimum compulsory contents", not only restricts the real possibilities of achieving educational quality as established in the General Law of Education, but also further limits, and even restricts, the real possibilities of contributing, from the school environment, to the integral development of the personality, in all its areas and/or dimensions. In effect, these erroneous understandings base the principle of integrality of education on the diversity of contents, not on the real achievement of development of each of the dimensions of

the personality; Although the curricular bases highlight the idea of "essential learning", in reality they constitute relevant content. Beyond this, it is necessary to emphasize that the most essential product of learning is the integral development of the personality; Consequently, learning is not development, but without a doubt, it is its fundamental engine.

In many contexts, academic, scientific and, especially, school, learning is defined as a process of construction of knowledge of an internal, active and personal nature, that is, the idea is sustained, as an essential understanding, that learning is knowing. However, it must be understood that human beings have been endowed with the ability to know and learn from what they know. Not everything that is known, is learned. This simple fact, widely discussed by the teachers and experts participating in this research, made it possible to establish that, although they are closely linked, they are psychointellectual processes of a different nature, so it is not possible to build an adequate understanding of school learning without analyzing their complex relationships with the process of human knowledge.

Therefore, to account for this pedagogical challenge of the first order brings with it an epistemological problem of origin, namely, in general terms, learning theories provide explanations in which the boundaries of both processes, as well as the nature of their relationship, are not fully defined, which generates fundamental biases in their understanding and their subsequent transfer to the design of teaching. There are two important questions that must be taken into account, when it comes to analyzing the different exponents of the theories of human learning, first, why do the greatest exponents of the theories of human learning, and many of the intellectuals before them, end up referring to learning and knowledge interchangeably, as if they were the same? Second, why do they end up talking about learning as a terminal product, as an organized body of meaningful material to be acquired, as concepts, networks of concepts, definitions, principles, and theories to be apprehended? Finally, it ends up talking about the content of learning, and not about learning itself.

It is imperative to establish that most learning theories have been built within the framework of a traditional epistemology of knowledge, which, in some way to this day, continues to direct the understandings of school learning that define the identity of the educational process in most schools and high schools in Chile. In traditional epistemology, knowledge is represented by the information and universal knowledge available, and the act of knowing, by the process of acquisition and/or transmission of these. By a traditional logic, school learning has been understood as the process of acquiring, storing, using and/or applying information, understood as essential knowledge defined by the current curricular design. For Di Girolamo, C. et al (2013), conceiving learning in this way implies conceiving knowledge as a given and unquestionable truth, therefore, it can be deduced that the role of school learning would consist of enabling the acquisition/reproduction of that truth. In this context, the challenge for Chilean schools must be aimed at overcoming the erroneous understandings of knowledge-centered education, to move to knowledge-centered education, as the foundation of strategic learning. In fact, "knowing what to teach is not transferring knowledge, but creating the possibilities for its own production and construction" (Freire, P. 1997, p. 47).

### **The Process of Knowledge and the Attribution of Meanings As Foundations of School Learning.**

Nowadays, new understandings of human knowledge have been developed, based on critical epistemologies, which define it as a dynamic construct, a conscious understanding that each student builds from his or her real state of development. Knowledge, as highlighted by Pérez, A.

(2019), is never a mere figurative copy of the real, on the contrary, it is a subjective elaboration that leads to the acquisition of organized representations of the real and the formation of formal instruments of knowledge. In the same way, Delors, J. (1994, p. 2), states that knowledge "is multiple and infinitely evolving, it is increasingly utopian to pretend to know everything; therefore... the idea of an omniscient knowledge is illusory." In effect, these new epistemological understandings lead to visualizing knowledge as exploration, discovery, comprehension and complex representation of the phenomena and processes of reality, while learning implies the appropriation of these understandings/representations and their subsequent integration into the structures of behavior themselves.

Within the framework of this perspective, it must be understood that "human knowledge occurs in a living organism that has a certain structure and function, within a certain evolutionary history" (Lecannelier, F. 2012, p. 16). The ability to know arises in the context of interaction with others. It is not until the person is integrated into social life and participates in its process of cultural construction and reconstruction that knowledge emerges as a biopsychosocial process, since he knows from the integrality of his biological, psychological and social being.

Human knowledge, as a process of human nature and a consequence of its historical, social and cultural evolution, is born from social practice, from understanding the being as a cultural subject that seeks to understand the complexity of its reality and tend to its transformation. In this sense, knowledge is understood as a dialectical process "of non-transferable relationship between the subject and the object, with psychological, socioeconomic and cultural mediations. From this perspective, it is defined that knowledge is constructed by the subject, and cannot be transferred by others, has a personal and social character due to the historical dimension, and is perfectible and unfinished" (Joao, O. et al 2005, p. 60).

On the other hand, Lecannelier, F. (2012), following the epistemology of Humberto Maturana, defines knowledge as the human way in which we are inserted in the human world. The particular way of experiencing things of the human being is not something different from knowledge. Everything we experience is knowledge, human experience is human knowledge. Thus defined, knowledge is not a typically rational phenomenon, nor is it a phenomenon specific to the totality of the organism, but defines being in the world of the organism. Knowledge is then the product of certain conditions of personal development and a certain accumulated historical-social experience; it is, therefore, essentially dialectical and contextual, which consists of "creating new experiences, skills and competencies that accumulate at the individual and organizational level, and are converted or transferred to new products" (Castro Díaz-Balart, F. 2006, p. 67).

In fact, as a process and product of a high level of complexity, it arises from man's encounter with the phenomena and processes of both the physical and social worlds. In this sense, "because the act of knowledge is at the same time biological, cerebral, spiritual, logical, linguistic, cultural, social, historical, knowledge cannot be dissociated from human life or from social relations" (Morin, E. 1999, p. 27). It arises then, as a need to understand and interpret their nature, characteristics, properties, concatenations, regularities, laws, structural-functional components and the context that determines them.

Knowledge is understood as a multidimensional phenomenon "in the sense that, inseparably, it is at the same time physical, biological, cerebral, mental, psychological, cultural and social" (Morin, E. 1999, p. 20). Knowledge must not be separated from the subject who knows, from the object of knowledge or from the circumstances in which it is known. From this perspective,

it is not a purely objective phenomenon, but arises from subjectivity and intersubjectivity. Knowledge must be seen "as a process that occurs to the individual while he or she lives and, therefore, its study and reflection cannot be separated from the point of view of the relevance of what it means to know for a human organism" (Lecannelier, F. 2012, p. 16). It is in this sense that knowledge is an essentially constructive process, non-transferable to others, whose main problem is that of appropriation.

While it is true that knowledge and learning occur in the context of what we have defined as activity, practice or task, in short, experience. For learning there is an additional condition, the significance attributed to that experience. As Di Girolamo, C. et al (2013) put it, learning involves the construction of meanings and, therefore, the appropriation of those understandings built in the process of knowledge. It is through significance that the process of appropriation of this construction, which we have defined as knowledge, takes place.

Significance is a concept used to refer to the fact that certain facts, phenomena or processes of the world are not indifferent to us. It is, therefore, a quality that assigns value to something that interests us or that we have defined as important. As an assigned value, it is attributed by the individual himself, most of the time intentionally and consciously, in the process of constructing knowledge, to separate what has true meaning, from what is indifferent, unnecessary or worthless to us. Significance, therefore, gives meaning to appropriation, thus enabling conscious human learning. In this sense, Coll, C. (1988: p. 134) established that "the student learns any content, when he is able to attribute a meaning to it".

Significance as an essential human experience gives validity to certain ideas, concepts, theories, experiences, methods, processes that we want to incorporate into our personal scaffolding. In this sense, according to Colomés, D. (2016: p. 44), it is intrinsic to the human being to live in the world by assigning valuations of significance, highlighting or emphasizing something particular. He also adds that, in our experience of the facts and things of the world, we signify the whole world. This phenomenon is closely related to some of the main dimensions of human personality development, such as affectivity, attitudes, motivations, interest and expectations of the personality. In this way, there can be no learning without the attribution of meaning and/or significance to experience, by the human being himself.

So, can there be school learning without the attribution of significance to teaching experiences? In this sense, the approaches of Heredia, Y. and Sánchez, A. (2013, p. 12) take on value, when they state that "the task of the teacher is not to present new concepts that have already been constructed", but to enable the construction of these by students, since "the construction process is a self-motivated process" which makes external reinforcement unnecessary. The consolidation of learning is only possible through constructive and meaningful processes. While knowledge constructs psycho-intellectual representations – of varying quality, depending on the circumstances of development of each student – of the phenomena and processes of the natural and social world, learning makes it possible to integrate them into our framework of understanding reality. The process of knowledge is structured, then, as the foundation of school learning.

### **Around the True Identity of School Learning.**

From an epistemological perspective of complexity, it must be understood that learning is not an observable, measurable or quantifiable process, except for its most concrete expression, which is behavior, understood as a direct consequence of the psycho-intellectual development

of the student. In this sense, as stated by Manterola, M. (1998), learning is an internal process that takes place within the individual who learns, and that it is not possible to make direct observations about learning, therefore, it cannot be measured or quantified from the context of the teaching-learning process itself.

To understand the complexity of the school learning process, it cannot be marginalized from its relationships with other critical processes. It constitutes, therefore, a psychic process that has its foundations, which sustain it; its characteristics that describe it; its factors, which determine it; and its effects, which are evidence of it. It is based on conscious understanding and the attribution of meanings. It is configured as a dialectical, therefore, non-linear process of understanding, valuing and appropriating social culture, which results in the cognitive structural modification of the learner, as well as a change in the meaning of his experience and, therefore, the integral, multilateral and harmonious development of his personality.

From this understanding, five questions of vital importance for understanding the true identity of school learning emerge.

In the first place, there is a direct relationship between knowledge, understood as complex understanding, and school learning, understood as conscious appropriation, since no one learns what they do not know. It is not possible to learn something without fully understanding it. In this context, Pozo, J. (1996), stated that in the educational act it is no longer a matter of acquiring absolute knowledge that is then blindly reproduced, on the contrary, he established that today we must focus on constructing our own relative truths. In the same vein, Pérez, A. (2019) stated that the real challenge, in the context of school learning, is to transform information into self-knowledge, autonomous and active as a premise for understanding and acting. Certainly, without understanding there is only fragmented, fragile, superficial and instrumental learning. From this perspective, it is proposed, as an essential definition, that knowledge, as a complex understanding of the phenomena and processes of the natural and social world, constitutes the foundation of school learning. Comprehension is not learning, as it has been defined in many specialized texts, but it is its initial foundation. The increase in learning potential is directly related to the strengthening of the knowledge process of all students; therefore, raising the capacity for comprehension becomes one of the essential purposes of school education.

Secondly, it is necessary to establish that no one learns something if it is not meaningful to him, that is, if he has not attributed meaning and/or value to it. As already mentioned, significance is an essential condition of human experience, when it comes to learning. For there to be learning in the school context, it is not enough for teaching to be contextual, or to respond to a need of the students; the appearance of motives, understood, in a general way, as inductive components of the development of the personality is required as a requirement; that is, if the appropriate senses and meanings are not constructed, it is very unlikely that the expected learning will occur. In this sense, Di Girolamo, C. et al (2013) establishes, learning does not begin from nothing, but from the construction of meanings based on the meanings that each person already has about something. Coll, C. (1998, p. 134) establishes the same perspective when he defines that "The student learns any content when he is able to attribute a meaning to it". Therefore, it is affirmed as an essential definition that the construction of meanings and meanings constitutes a critical factor in the management of the teaching-learning process.

It is in the process of understanding and attribution of meaning that appropriation occurs as an active, strongly reflective, conscious and intentional process. But how does this appropriative act actually occur? And what does appropriation really imply? It is in the context of these

questions that the third question of vital importance for understanding the true identity of school learning becomes relevant: it is assumed as an essential definition that it is not possible to learn something if we do not build a mental model, our own representation of the complexity of the object of study. In fact, this modeling activity, which plays an essential role in the process of knowing and learning, is what gives meaning and significance to appropriation, that is, what defines the true identity of school learning. We can understand appropriation as acting on the object of knowledge, to internalize it and make it our own from a representation, which can be expressed conceptually, visually, symbolically, pictorially, etc.

Fourthly, it can be assured that, in the context of the dynamics of students' internal development, all real learning generates a profound cognitive structural modification, both of the individual's psychic functions and of the capacities that he or she manages to develop. In this sense, Pérez, A. (1992) establishes that learning produces a modification and transformation of internal structures that, once modified, makes it possible to carry out learning of greater richness and complexity, thus establishing that school learning is a factor and product of the student's development. In other words, all learning generates cognitive structural modification and all general cognitive structural modification better learning. Within the framework of these definitions, it can be defined that the internal structure of the subject, understood as his or her intelligence potential, is directly related to the learning potential and vice versa. In this same sense, Feuerstein, R. (1998), states that intelligence is not a closed and passive system, an invariable matrix established in perpetuity by genetic and/or environmental factors, on the contrary, it is a dynamic system open to change and transformation, it is subject to a process of dynamic self-regulation, capable of responding to the intervention of the external environment. In this case, the design of the teaching-learning process.

Fifthly, it is established as an essential definition that all real learning generates, in an authentic way, a change in the meaning of the experience. In fact, in the development of his understandings of general learning, Ausubel, D. (1980) states that it should not be referred only to a simple change in behavior, but that it leads directly to a change in the meaning of experience. In other words, human beings not only seek to understand the world in which they live, but also seek to link themselves in some way with it. In fact, in this same sense, the aforementioned author states that human experience is not related to exclusively cognitive processes, but also includes affectivity, and that only by achieving the integration of both can the meaning of their experience be enriched. In this same sense, Soubal, S. (2008), synthesized in this regard that it is in the learning process where the student manages to develop new meanings, which lead to the emergence of new motives, preferences, and even new expectations. These approaches do nothing more than explain the foundation of one of the main laws of pedagogy, the unity of the cognitive and the affective as an essential premise of an education truly focused on learning. In fact, in the context of this study, it is assumed as an essential definition that learning is a multidimensional process since it includes not only the cognitive and the affective, but also the value, the motor and the volitional, which correspond to the dimensions of the integral formation of the personality.

Assuming, in short, that learning as a process of cultural appropriation is a product and, therefore, is determined by two important psychointellectual processes such as knowledge as understanding and significance as the attribution of value; likewise, as a factor, it conditions two other important psychological processes such as cognitive structural modification and the change in the meaning of experience. In the context of this complexity, school learning should be understood as:

An internal and particular psychic process of each of the students (intrapsychic); progressive, complex and self-regulated; essentially dialectical and multidimensional, which consists of the conscious, active, reflexive and creative appropriation of a cultural selection defined by the school curriculum, in order to guarantee its permanent self-improvement, in a certain defined direction, generating a relatively stable modification of behavior, as well as a fundamental change in the meaning of the experience.

It involves the restructuring and integration of new knowledge, which makes possible the transition from the zone of actual development to the zone of potential development or desired future state. Therefore, its final focus is change, the transformation of personality and consciousness, which is nothing more than the construction and reconstruction of its own development.

Learning, determined historically, socially and culturally, occurs as a result of activity and under conditions of orientation and social interaction (Interpsychic), mediated by a set of regulatory structures, such as psycho-intellectual development, the quality of internal motivation, the development of self-regulatory capacity, the inductive components of personality, the quality of experience, the strength of the cultural construct of the context, the quality of the decision-making process, among others. In short, learning determines and is determined by each student's own potential for development.

School learning implies the appropriation of knowledge that, within the framework of the new critical epistemologies, takes the form of: knowledge, values, thought processes, skills, abilities, and abilities, models, strategies, methodologies, procedures, forms of activity, affective behaviors, habits, norms of relationship and behavior, etc.

### **Essential Principles and Characteristics That Define the True Identity of School Learning.**

The processual and complex nature of school learning must first be determined. As had been established, learning is not a product, an activity or a content, but a process that has a particular rhythm and characteristics according to each individual. Pozo, J. (1996) referred to this in defining that each of the students must learn to construct, gradually and constructively, their own relative truths. Certainly, learning is a process, of several natural phases, that begins with the conscious understanding of the phenomena of reality, and culminates in a real change in the meaning of experience. Encouraging the student to go through each of these phases, according to their own potential, is the true essence of an education focused on learning. That the student fully understands what he studies, that he attributes the corresponding meaning to it, that he is modeled/represented based on his qualities -as a form of appropriation-, that he modifies the structure of his intelligence potential and that he diversifies the ways of relating to that particular reality constitute the processual sense of school learning. In relation to the level of complexity of school learning, Pérez, A. (1992) stated that this is a phenomenon that is not understandable without its link with the dynamics of development. A complex dynamic that is given from the necessary integration of five dimensions that constitute integral development and are, therefore, essential areas of the school learning process: cognitive, value, affective, motor and volitional. On the other hand, the degree of complexity of learning is also explained by the structure and conditions of the teaching content. Indeed, learning concepts, principles and theories is not the same as learning skills, abilities and/or competencies, as well as methods, models and procedures.

Secondly, it is defined that learning is a proper, particular and non-transferable process of each student, since their learning potential acquires an identity configuration, mediated by the characteristic structure of their intelligence development. In other words, this potential would be determined by the degree of cognitive, metacognitive, value, affective, motor and volitional development, understood as areas or dimensions of the personality of each student. Indeed, as Ertmer, P. and Newby, T. (1993) state, the complexity of learning changes as development increases, it does not present itself in the same way throughout people's lives. The approaches of Pérez, A. (1992) are oriented in the same direction when he establishes that the internal structures of the subject condition learning, and that this, in turn, causes modification and transformation of these same structures. It must be understood, in the context of this understanding, that when we talk about school learning, we are not referring to what a student should or can learn, but to how he or she is intelligently prepared to do so. This is the main reason why the standardization of school learning is not possible. All this, without forgetting that particular development is determined, at the same time, by the conditions of one's own individual existence. In addition to taking into account that, despite its particular and non-transferable trait, the learning process occurs mostly in a context of exchange with others.

Thirdly, it is specified that the set of internal processes, of a comprehensive-significant nature, which enable conscious appropriation and therefore configure human and school learning, are not observable, measurable or quantifiable, except for their most concrete or direct expression, which is behaviour. Indeed, as Gagné, R. (1975), Papalia, D. and Wendkos Olds, S. (1996), Manterola, M. (1998) and Bermeosolo, J. (2013) had already defined, referring to general human learning, it generates the progressive triggering of a set of internal mental processes, which cannot be observed. However, they also propose that, together with learning, a set of observable responses are produced, which are manifested in a change in behavior and that configure in an integrated way, the particular psychointellectual development of each individual. From this analysis, it can be concluded, therefore, that what should be evaluated, measured and qualified, in the school context, is not learning in itself, but the observable responses that are evidenced as human development.

Fourthly, among other particular characteristics, the conscious and intentional nature of school learning is highlighted. From this idea derives a fundamental fact, no student learns, in the school context, if he does not want to do so. In this sense, it follows logically that any behavioral change that is imposed by force, as a result of fear or authoritarian coercion, does not constitute in essence learning and, therefore, does not lead to integral development. Learning, in this perspective, is linked to will and decision-making. The will to learn implies the existence of a deep intention that allows the student to consciously face the tasks related to his or her own self-development. In the same way, learning is related to an essential decision-making process on the part of the student, regarding their expectations, interests, objectives and/or goals that may constitute part of the life project they are willing to build. From this perspective, the teaching-learning process acquires the character of contextual, directed, dynamic and, essentially, formative.

Fifth, it is necessary to specify the existence of a dialectical relationship between learning and development. In fact, the learning potential of each student directly determines the real possibilities of his or her own psycho-intellectual development. Learning is not development, but without a doubt, it is its fundamental engine. Although development depends, in essence, on learning, it must also be considered that this has a significant impact on increasing their potential.

According to the approaches of Pérez, A. (1992), Learning is both a factor and a product of development. He explains that the initial structures of the individual condition the learning potential, adding that, once it occurs, it causes the modification and transformation of the same structures, which makes it possible to carry out new learning processes of greater richness and complexity. Maturana, H. (1982) was guided by this same perspective, when he established that behavioral change, which is generated as a consequence of the phenomenon of learning, triggers a set of changes in the structure of the nervous system that follows the drift of conservation and adaptation of the organism. The same author concludes that the learning process is not about grasping the world, as the word itself suggests, but about changing with the world.

In the context of this research, the definitions of Valera, O. (2012) are recognized as their own, who establishes five basic pillars for a model of integral human development: First, "knowledge", referring to the formation of concepts, networks of concepts, ideas and general definitions. Second, "know-how", understood as the formation of thinking skills for study and permanent self-learning, as well as the configuration of disciplinary, professional and/or work skills. Third, "knowing how to be", related to the appropriation of skills related to personal, ethical and aesthetic self-awareness. Fourth, "knowing how to live together", refers to the formation of social, ecological and health skills. Finally, fifthly, "know-how", understood as the development of scientific-technical, creative and innovative skills.

Sixth, it is revealed that school learning is a mediated process, not only by the nature of the psycho-intellectual structure of the person who learns -intrapyschic process-, but also by the quality of the relationships that students experience -interpsychic process-, with other members of the educational community, in the context of the experiences and activities designed by the teacher. In fact, learning occurs in the context of a significant link with others, which gives it its social character, determined by the quality of the reflective processes, the conditions of social interaction, the level of contextualization of the proposed experiences, as well as the nature of the process of classroom cultural construction and deconstruction. According to Maturana, H. (1982), learning would constitute a structural change, as a consequence of the epigenesis of the organism itself, thus relieving interaction with others, as a factor and/or foundation of school learning. Castellanos, D. et al (2002), on the other hand, puts forward the idea that conscious appropriation is an essentially dynamic, active and reflexive process, which is produced by interaction with other people. In this same sense, considering the social nature of learning, Quiroga, A. (2009, p. 61) states that, "one learns to learn with others, from another, through another, for another and also against others".

Seventhly, it is specified that learning is a process of a transformative nature, not only of the internal structures of the learner, but, eventually, of the very circumstances that define the existence of the person. In fact, this same perspective has been defined by Pruzzo, V. (1997), who highlighted the transformative potential of learning, both for the learner and for the reality in which he or she acts. In the same way, Castellanos, D. et al (1999) and Pérez, A (2019), defined learning as a continuous process of construction, deconstruction and reconstruction of the network of representations that generate relatively lasting and generalizable changes in student behavior. Certainly, this approach was already supported by Maturana, H. (1984), establishing that learning does not consist in grasping the world, but in changing with the world. This multidimensional change in the architecture of personality is presented as an essential modification in the basic structures of thought; in raising the level of complexity of understandings and representations of the world; in a growth in the degree of mastery of skills, abilities and abilities; in an increase in awareness and greater general sensory-perceptual

Finally, eighth, it must be established that there are learning processes that have a strong impact on development, while others do not. According to Castellanos, D. (2003) there are new acquisitions that contain in themselves the potential to promote new transformations and promote the student's transition to higher levels of development. This is the developmental or strategic character that defines the true identity of school learning. Certainly, although the learning process is unique, manifesting itself in a particular way in each student; From the perspective of content, they can be divided into at least two levels, the instrumental, which implies the acquisition of some type of specific knowledge that makes it possible to access other higher developments; and the developer or strategic, understood as the appropriation of capabilities and/or competencies, which are nothing more than mental configurations of the highest level of complexity.

## Conclusions

**First Pedagogical Consideration:** The understandings of learning will determine the design, organization, and implementation of teaching. In this sense, any effective teaching-learning process must be based on a correct interpretation of school learning. That is why all educational institutions, within the framework of their Institutional Educational Projects, must ensure the construction of a common comprehensive framework, which in an endogenous, participatory and consensual way generates a theoretical/practical model on school learning, as a requirement, not only for the design of effective teaching models, but, essentially, to correct the biases in the pedagogical thinking of teachers that have been marking, for decades, an erroneous direction of the educational work of the school.

**Second Pedagogical Consideration:** Educational institutions must undertake transition processes from the idea of diversifying "learning opportunities" to increasing the "learning potential" of each of the students. Therefore, it is concluded that the challenge of quality of the educational proposals of school institutions is not only a methodological problem, but is essentially curricular. So it is legitimate to ask: How to increase the learning potential of each of the students in the school context? Strengthening the process of knowledge construction will undoubtedly contribute exponentially to the development of learning potential. Certainly, the quality of each student's understanding will undoubtedly determine their level of learning. In other words, generating the development of psycho-intellectual tools (psychological functions, thought processes, capacities and/or competencies), as educational objectives, is essential to enable the understanding of increasingly complex phenomena or processes. The success of this understanding will determine the real possibility of learning, since no student learns what he does not understand, that is, what has not been represented in his mind. As Soubal, S. (2012) puts it, the development of thought as a gateway to knowledge.

**Third Pedagogical Consideration:** The backbone of any institutional educational proposal can be none other than the integral, multilateral and harmonious development of the personality of each of the students. Certainly, enabling the particular/original/unique development of each student, in the context of collective learning experiences, is undoubtedly one of the most significant challenges of the teaching models developed. Therefore, phenomena such as the integrality of objectives, motivation/significance, the representation or modeling of phenomena and processes, conscious reflection, collaboration, contextualization, and the inclusion of error as a didactic alternative, are critical principles for the design and management of teaching. The integral development of the personality, in this context, must be understood as a "directed

process, in particular the development of human individuality, in which the typical traits of the social subject are synthesized, as well as the achievement of the unity of cognitive and affective motivational processes as an expression of the integrity of the personality" (López, J et al 2000, p. 68).

**Fourth Pedagogical Consideration:** Educational institutions have the obligation to ensure the design and development of an Institutional Curricular Framework, which makes it possible to move from educational objectives by content, to educational objectives by ability and/or competence, in order to align the study programs and the design of teaching with the mental models of how our students learn. Indeed, a truly learning-centered education consists of equipping the student, through the training process, with the mental tools to learn and continue learning in a sustained way. These psycho-intellectual tools include the higher psychological functions, including the higher thought processes; the structural components of human affectivity, including emotions; the capacities and/or competencies, including the skills and abilities that make them up; values and attitudes as essential expressions of social and school culture; as well as all those aspects related to the volitional dimension of personality development. All these constitute essential purposes of education and, therefore, must be translated into strategic educational objectives. We must remember that, in the context of this model, conceptual knowledge, as well as methods and procedures, constitute means for the formation of the strategic objectives of education.

**Fifth Pedagogical Consideration:** Contents, as ways of knowing, as well as methods and/or procedures, as ways of doing, should be considered as means for the development of educational objectives focused on capacities and/or competencies Román, M. (2005). In a teaching-for-development model, educational objectives must be presented as psychological functions, capacities and/or competencies. The latter, from the school point of view, are classified into two large groups, the generic ones of human development -such as communication, problem solving, inquiry, etc.- and the disciplinary -specific ones of each of the subjects-. So, in the context of their school curricular projects, organizations must ask themselves... what are the capacities/competencies of each subject? and How are these expressed by level and cycle of education? It is therefore essential that each school institution defines the capacities and/or competencies by subject, level and cycle of teaching, as well as the determination of the skills and abilities that make them up. This is the first curricular step for any school that wants to move from a content-centered education to a truly learning-centered institution.

**Sixth Pedagogical Consideration:** In this sense, assuming an educational model based on abilities and/or competencies, adjusted to the requirements of psycho-intellectual development of its students is, without a doubt, one of the main challenges of management and teaching teams. Certainly, the curricular foundation of any educational proposal focused on learning and, therefore, on the integral development of the personality, consists in the need to design training processes, which allow the formation of skills, abilities and/or competencies to be "anchored to the mind" as essential components of development. Indeed, as Román, M. (2005) puts it, "both capacities and skills, as well as abilities, are always mental actions that can be enunciated in the infinitive or not. On the other hand, mere actions external to the mind will never be objective by abilities or skills." Therefore, designing the process of forming a capacity and/or competence, in a gradual, progressive and constructive way, based on the integration of the skills and abilities that make it up, including structuring contents, such as ways of knowing, as well as methods/procedures as ways of knowing, as well as values and attitudes, is an essential requirement of the curricular and didactic design of any subject.

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