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EDUCATION IN LATIN AMERICA, WHAT COULD WE DO?¹

LA EDUCACIÓN EN AMÉRICA LATINA, ¿QUÉ PUDIÉRAMOS HACER?

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SUMMARY.

Education has had different trends throughout history. The teaching-learning process has been modified through generations. Each region or country had its own characteristics that differentiated them. With the socio-economic approach of globalization, these regional characteristics have been lost. After World War II, the so-called modernity in Western countries has tried to unify criteria and equalize learning methods with the aim of reducing the knowledge and technology gap that exists among the most developed countries and those

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that are still developing. For our Latin American subcontinent, which despite its cultural diversity shares common histories and traditions, trying to adapt our teaching methods to those developed in the countries of the northern hemisphere could be considered a hegemonic imposition or a neo-colonization. Our ethnic and cultural diversity needs its own methods that help educate current and new generations in principles of solidarity, inclusion, fraternal understanding, and respect among all. It is urgent to know how to teach by educating, and influencing the formation of constructive learning so that the educable subject contributes to the construction of better worlds. Teaching-learning methods without discrimination, with the desire to grow in the community, to have upright citizens, and to achieve the self-development that our countries need. A development with everyone and for the good of all.



Keywords: Pedagogy; constructivism; Otherness; Compassionate look; Understanding-edifying; Mesoaxiological perspective

RESUMEN

La educación ha tenido diferentes tendencias a lo largo de la historia. El proceso de enseñanza-aprendizaje ha sido modificado a través de generaciones. Cada región o país presentaba características propias que los diferenciaban. Con el enfoque socioeconómico de la globalización, estas características regionales se están perdiendo. Después de la Segunda Guerra Mundial, la llamada modernidad en los países occidentales ha tratado de unificar criterios e igualar métodos de aprendizaje con el objetivo de reducir la brecha de conocimiento y tecnología que existe entre los países más desarrollados y los que aún están en desarrollo. Para nuestro subcontinente latinoamericano, que a pesar de su diversidad cultural comparte historias y tradiciones, intentar adaptar nuestros métodos de enseñanza a los desarrollados en los países del hemisferio norte podría considerarse una imposición hegemónica o una neo colonización. Nuestra diversidad étnica y cultural necesita métodos propios que ayuden a educar a las actuales y nuevas generaciones en principios de solidaridad, inclusión, comprensión fraterna y respeto entre todos. Es urgente saber enseñar educando, e incidir en la formación de aprendizajes constructivos para que el sujeto educable contribuya a la construcción de mundos mejores. Métodos de enseñanza-aprendizaje en donde no exista la discriminación, sino el deseo de crecer en comunidad, de tener ciudadanos íntegros y de lograr el autodesarrollo que nuestros países necesitan. Un desarrollo con todos y para el bien de todos.

Palabras clave: Pedagogía; Constructivismo; Alteridad; Mirada compasiva; Comprensión-edificadora; Perspectiva mesoaxiológica

BY WAY OF INTRODUCTION

As Andrés Oppenheimer pointed out, Latin America is lagging behind in terms of technological development. Without targeting good education systems. Without supporting creative-minded people to develop important innovations, it is quite possible, as experts from Oxford University have predicted, that around 47% of jobs will come to be cared by Artificial Intelligence teams, robots with superior functional capabilities or other forms of automation, which is why he called his book "Every man for himself!" (Oppenheimer, A.; 2019).

Another author, Thomas L. Friedman, wrote geographical, and traditionally historical, divisions are becoming less relevant in a globalized marketplace and a virtually dwarfed world. In this scenario, ideas and projects can be shared without taking into account time zones or geographical distances, which is why it seems that the Earth was flat! (Friedman, Th. L.; 2007).

When Silicon was introduced to manufacture transistors, the number of transistors on a chip increased hundreds of times. From there, Facebook went out into the world in 2006. In 2007, Steve Jobs introduced the iPhone. Twitter became the protagonist of the disruption experienced in the field of information. Google released the operating system for Android. Amazon fueled the e-book revolution with its Kindle. Hadoop began to develop the handling and processing of massive series of data that we now know as Big Data (Torras, L.; 2018). Then, large volumes of information are disseminated in networks and databases through the Internet and Intranet. As Goñi Camejo (2000) points out, «Virtual libraries provide access to information almost immediately and from anywhere with the right equipment».

In line with the above, there are currently numerous spaces for online education and scientific research, which allows the international



circulation of non-face-to-face training programs for different professions, and better relations between scientific communities around the world (Sebastián, J. and R. Barrere; 2018). The proper use of all this technology, without a doubt, is very positive. The Covid-19 pandemic demonstrated its usefulness by allowing distancing only be physical and not social, but, in addition, it was possible to continue with the training of the student body in a non-face-to-face manner in most countries.

Shortly before the Pandemic, in 2018, the Israeli psychologist and historian Yuval Noah Harari asked in his book 21 lessons for the 21st century, How to prepare ourselves and prepare our children for a world of unprecedented transformations? A newborn now will be almost thirty in 2050. Moreover, if all goes well, they could be alive by 2100, so what are we to teach that boy or girl that helps them survive and thrive in the world of 2050 or the next 22nd century? (Harari, Y.N.; 2018).

How can we face this challenge in our lands in America?

SOME INTERNATIONAL CONSIDERATIONS

In ancient Greece, teaching divided into Trivium and Quadrivium. In the first, which included Grammar, Dialectic, and Rhetoric, they were taught to think and speak eloquently, while in the Quadrivium Arithmetic, Geometry, Astronomy, and Music were taught, such knowledge could provide the necessary elements to know and master their world (Díaz Alvarado, B.; 2017). Their logic was clear, first, they imparted general learning, and key intellectual skills to think, develop their own criteria and prepare students for their continuous self-learning.

Has the importance of teaching how to learn to think before anything else in the current educational process been lost? In the present 21st century, will transmitted knowledge to

improve life and Society, or is it saturating young people with information that may not be useful for their development as social beings? (Rodríguez Echenique, C.; 2021).

As Alexander Ortiz Ocaña has externalized, traditional pedagogy supports its pedagogical proposals in the behavioral psychological postulates of the classically conditioned learning of Iván Petrovich Pavlov. In the study of behavior without taking into account the introspection of John B. Watson and in the operant conditioning of Burrhus F. Skinner. Based on Behaviorism, pedagogy deepened its rote and verbalism conception of teaching; it did not take into account the opinions, interests, emotions, motivations, and needs of students. It became an authoritarian and vertical educational model (Ortiz Ocaña, A.; 2021a).

It was intended to educate an enlightened individual, a compiler of knowledge, with extensive general knowledge and a linear behavior according to the canons established by Society. This type of school, characterized by the behaviorist pedagogical model, had the primary function of shaping the behavior of students according to prevailing social needs. His priority focused on learning specific knowledge and concrete rules of conduct that the student would imitate, reproducing the cultural heritage of the generations that preceded him, without taking into account his critical and creative reflection (Ibidem).

Much earlier, Johann H. Pestalozzi, like his predecessors, Juan A. Comenio and Jean J. Rousseau, believed that the best solution to poverty in society and its many contradictions must be resolved with a good education. The objective that should be pursued was to mold a total moral being, who knew how to do good and love and whose actions were based on personal virtue. Pestalozzi imagined an education from a social point of view, whose objective was to prepare a critical, reflective youth, who could

contribute to their Society, and who could reach true human nature (Díaz Alvarado, B.; 2017).

Based on Pestalozzi's criteria, Friedrich Fröbel, the creator of preschool education and the concept of kindergarten. He developed the notion of comprehensive education, emphasizing the importance of games, toys, and recreational activities, in general, to learn the meaning of family, culture, society, creativity, and service to others in human relationships. He proposed that learning be based on the interest and actions of the student since education should have, as a task, to help man to know himself (Úbeda Sánchez, I.P.; 2018).

Already in the 19th century and the first half of the 20th century, John P. Dewey emphasized the development of teaching based on the knowledge that the learner has, from his experience. That is, help the student to continue increasing and perfecting the knowledge they already have, according to their previous experiences. The human experience not only implies thought, but it also implies affectivity and only if both considered together, is the student able to enrich the meaning of his experience. Experience, for Dewey, is the exchange of a living being with its physical and social environment, and not merely a matter of knowledge. Dewey also proposed the reconstruction of moral and social practices, but also of the beliefs that students have (González-Monteaudo, J.; 2001).

The school, for Dewey, should be conceived as conducive to the reconstruction of the social order; the educator should be the guide and counselor of the students. The new education had to surpass the tradition not only in the fundamentals of the discourse but also in the practice itself. The human being, according to Dewey, learns in the interaction with his environment and his capacity for functional adaptation, through trial and error. This allows them to thrive in the struggle to adapt and

dominate the environment in which they live (Ruiz, G., 2013).

When studying the nature and essence of the New School model, it would have to be said that education should start from reality, from experience, from the experiences of the students with a fruitful, useful practice, not only from books. It was necessary to free the student from the barriers that hindered their development, it was necessary to eliminate the obstacles so that they learned to think. This model considered as more important the student's needs, his own interest, and his spontaneity, which could form him for life. In the new school, students learn by doing, learning takes precedence over teaching and the student has the leading role, while the teacher's activity does not disappear, but rather recedes into the background (Ortiz Ocaña, A.; 2021b).

When Constructivism emerges, a proposed teaching paradigm, whose process perceived as a dynamic, participatory and interactive way with the student. Therefore, that knowledge becomes an authentic construction managed by the person who learns (cognitive subject). In this context, pedagogy is conceived as action-oriented. Lev Vygotsky and Jean Piaget stood out as key figures of constructivism, the former focusing on how the social environment allows an internal reconstruction, and the latter on how knowledge is built starting from the interaction with the environment.

The constructivist trend in education tried to mark a dissociation between the individual and the social, between thought and language. Hence, several proposals arose that tried to show that, by incorporating the socio-cultural and linguistic perspective into mental processes. It's possibly distinguished how the language and the social processes of the classroom could be capable of constituting the ways by which the students acquired and retained knowledge. In other words, it was very useful to consider individual

mental processes as apt to act in culturally organized environments, as was the case in the classroom (Serrano & Pons; 2011).

According to Doris Ortiz, when education and constructivism are related, with relative frequency, it seems that the main problem is that students are left free to learn at their own pace as if the students had to work with the proposed material, they themselves built the required knowledge, and the teacher was not involved in the process. For Ortiz Granja, this is an erroneous conception of constructivism since what this approach actually poses is the existence of an interaction between teacher and students, that is, a dialectical exchange between the teacher's knowledge and the student's own knowledge. In such a way that they reach a productive synthesis for both and, as a result, the contents are reviewed to achieve meaningful learning (Ortiz Granja, D.; 2015).

Jerome Seymour Bruner, an American psychologist, teacher, and pedagogue, made important contributions to cognitive psychology and learning theories. Bruner is one of the authors whose contributions, from the second half of the 20th century to the present day, have contributed to rethinking Education. He tried to generate changes in teaching that would overcome the reductionist and mechanistic models of rote learning centered on the figure of the teacher. For Bruner, this type of teaching impeded the development of the intellectual potential of the students, since he conceived them as passive receptors of knowledge. On the contrary, in the constructivism proposed by Bruner, students are active constructors of meanings and of their knowledge (Siciliani Barraza, J.M., 2014).

Learning, then, consists mainly in characterizing new concepts. For this, it is necessary to simplify the interaction with reality to facilitate action. Such categorization is linked to the selection of information, generation of propositions,

simplification, decision-making, construction, and verification of hypotheses. Thus, the student who learns interacts with reality, organizes the information received according to his own categories, or probably creates new ones, or modifies the existing ones. According to this model, learning concepts imply a strategic inductive process of successive formulation of hypotheses about the attributes that make up a specific category (Camargo Uribe, A. and C. H. Martínez, 2010).

The categories created can determine different concepts. In short, learning is an active process of association and deconstruction-construction. The categorization created by the student gives meaning and organization to their experiences and allows them to go beyond the information given, since to integrate it into their cognitive structure they must contextualize and deepen it, and for Bruner, this is an essential factor in learning. However, later, perhaps because of his adherence to Vygotsky's ideas, he considered that each human group builds, or knows, its own, and particular, possible world through its culture and due to the role of language in the construction of knowledge. In this new perspective, Bruner proposes that in a sociocultural world, the way of communicative interaction with the others is what makes it possible to build a world with meaning, that is, to learn to transform information into knowledge (Ibid).

In the middle of the 20th century, and up to the first decade of the 21st century, David Paul Ausubel delves into the way in which knowledge is acquired, and the way in which it is incorporated into the learner's cognitive structure. For Ausubel, true knowledge can only be born when the new contents have a meaning in light of the knowledge that is already had. In other words, the new information assimilated makes previous knowledge more stable and complete, so that learning becomes meaningful. Learning is significant when it can be related, in a substantial



and opportune way, to what the learner already knows. Underlying meaningful learning is the constructive integration of thought, feeling, and action, which leads to their aggrandizement as human beings (Cañaveral Bermúdez, L.J., et al. 2020).

According to Ausubel, to achieve meaningful learning, two conditions are necessary. That the learning material has meaning in itself, that its various parts are related with a certain logic, and, secondly, that the material is potentially significant for the learner, that is, that the new material has, in its structure, some ideas that the student can relate it. In this case, learning depends on the previous cognitive structure that can related to the new information.

To achieve the learning of a new concept, the teacher must build a cognitive bridge between that new concept and another pre-existing idea of a more general nature, but that was already in the student's mind. The learning subject perceives and represents what is being taught. Then, Ausubel's significant learning refers to the direct interaction of the student with his environment. This situation is reminiscent of that proposed by Vygotsky, who expressed that learning occurs in significant social settings, where mediation processes are generated (Cañaveral Bermúdez, L.J., et al. 2020).

The increasingly demanding challenges facing education have led to the development of various paradigms or models that try to achieve effective learning. Among them, it is possible to point out the so-called: Project-Based Learning; Discovery Based Learning, and Problem-Based Learning. None of them should be considered superior to the others and all three have been derived from cognitive sciences. These learnings are considered active, and/or student-centered since they try to lead to the motivation that arises from the very fact of learning, and not because of an external incentive such as the grade. (Gutiérrez Ávila, et al.; 2012).

IN OUR LANDS OF AMERICA

However, what do we have today? The purposes and practices of today's world are fundamentally based on the management of utilitarian knowledge, the strengthening of cognitive processes that are operative, and attitudes that allow them to develop in the complex world in which we live, a world governed by the laws of the market, supply, and demand, where profitability is above the person, and even life. In other words, far from training people for life, in current education projects economic productivity and profitability predominate, as the President of REDIPE Julio C. Arboleda (2014) has pointed out.

In the specialized literature, the term "competence" refer to the combination of skills, aptitudes, attitudes, and knowledge. Also the inclusion of the willingness to learn. A competence presents an internal structure with its cognitive, meta-cognitive, and affective-relational components that respond to the different types of knowledge; explicit, implicit, and causal, but simultaneously requires a specific ability, "ability to cooperate" which, in addition, must be dependent on a context (Serrano and Pons; 2011).

For Professor Arboleda, the competency-based approach, the educational model of the globalized world, mainly encourages the development of competent citizens for market-social relations. Nevertheless, it is not prepared for a more humane life. The citizen of the global world is not educated to socialize with his fellow citizens, but to compete and reproduce the order of profitability and competitiveness. It does not promote the strengthening of the human component in each being; on the contrary, they are processes that depersonalize. Solidarity and other values that it supposedly promotes are more utilitarian than ethical (Arboleda, J.C.; 2014). María Montessori said that in the world everyone talks about peace, but nobody educates for peace, merely educate for competition and this is the beginning

of any conflict. When we decide to educate to cooperate, to be in solidarity with each other, that day we will be educating for peace.

ALTERITY IS A NECESSARY CONDITION

Our America, as José Martí called it, is multicultural and it can be enriching if we see those differences, that “Otherness”, as a complement, as a path to communication and learning. We are social beings; we need the presence and cooperation of other people to survive. Just “us” is not enough, we also need “others”, since they constitute social wealth in their diversity and that implies not only growth personally, but in the entire collective.

Feeling sorry for the other, feeling the other’s pain as one’s own, is a behavior that is not necessarily born of reason. Compassion and owning the cause of the suffering of the other do not respond to our daily actions, but reason and feelings intertwine and merge in our conduct. As Ortega y Gasset said, «the roots of the head are in the heart». Zubiri considered it as a kind of «sentient intelligence» (Ortega Ruiz, P.; 2020a).

Here we should touch on the term “Otherness”, authors such as Husserl, Sartre, Derrida, and Lévinas, have developed the concept that the presence of the other is not only necessary for the existence and constitution of one’s own self, but, and above all, for the constitution of intersubjectivity. Alterity implies putting oneself in the place of that “other”, alternating one’s own perspective with that of others, as a sign of interest in understanding ourselves and working together for collective development (Vázquez Fernández, A.; 2014).

Otherness represents the will to understand, the promotion of dialogue and peaceful relations, it is to alternate or change one’s own perspective for that of the other, considering in addition taking into account the point of view, the conception of the world, the interests, the ideology of the

other; and not assuming that our perspective is the only possible one. Education and pedagogy, based on the perspective of alterity, are focused on the ethical relationship with the other, that is, it is a process of humanization, of creating more just and humane environments.

Otherness is the perspective of orienting the act of educating and the pedagogical praxis towards scenarios that result in both the student and the educator being allowed to assume with ethical responsibility their work of welcoming and accompanying the “other” in their otherness, in their limitations, its potentialities and its uniqueness. This perspective disposes them to establish ethical relationships with others and actively participate in the generation of better environments for a dignified life (Arboleda, J.C.; 2014).

Differences must be based on and avoid asymmetric relationships and forced homogenization. In a multicultural society, differences could be associated with a deficit, a deviation from the norm, and thus stigmatizing and labeling the less advantaged students. From otherness, inequalities can be combated. As Paulo Freire proposed, educate based on the particularities of each person (Bravo Reinoso, P.; 2014). For just over a decade, UNESCO has placed the search for social cohesion, the fight against inequality, and respect for cultural diversity at the forefront.

We could feel dazzled by the advancement of technology and Science, but this does not make life more human. Without compassion for the most vulnerable and disadvantaged, life in Society would be very difficult to bear. Only a “compassionate look” at others and ourselves alike are capable of building a society that makes truly human life possible. Assuming the bonds of fraternity that unite all humans, entail an act of love, a compassionate gaze, and this implies another ethic, another way of relating to



the world and to our fellow men (Ortega Ruiz, P.; 2021).

A compassionate look. –

At present, there are four major currents of thought, which synthesize the different ways of answering the Socratic question. Can virtue be taught? a) Moral education as cognitive development. b) Moral education like the formation of virtuous habits or character education. c) Moral education as an ethic of care. d) Moral education as an ethic of compassion (Ortega Ruiz, P.; 2020b).

No human is disconnected from time and space, nor from the context or history through which we “understand and explain ourselves”. Humans are social beings; culture is our exclusive way of living and existing in the world. Morality is the set of rules of conduct and the way we relate to others. Morality is the result of inheritance and of learning. Nevertheless, our relationship with others is not the same way; it depends on how we imagine the human being (anthropology) and what is the ethics with which we relate. Ethics and anthropology go hand in hand one supports the other. A certain conception of man inevitably implies a certain way of being and being in the world (Ortega Ruiz, P.; 2021).

To Ortega Ruiz, the way of understanding anthropology and ethics breaks with the autonomous, self-sufficient conception of man, installed in Western thought, which has permeated the pedagogical discourse and educational praxis» (Ortega Ruiz, P.; 2021; p. 25).

Talking about a “compassionate look”, says Ortega Ruiz, may seem strange. In fact, the term “compassion” is often surrounded by prejudices and distorted interpretations. It must be clear that compassion is not welfare, charity, and commiseration. Compassion is a liberating

commitment from the possible causes that oppress vulnerable human beings. It implies the desire for justice for the abandoned or marginalized. Compassion is an “encounter” with the dispossessed man and with “all” his reality, but at the same time, a political commitment to help and emancipation that leads to work to transform the unjust structures that generate suffering and situations of dependency and marginalization. (Ortega Ruiz, P.; 2021; pp. 34, 35).

The emotions of the students are so important that, without a close interconnection between the emotional, the rational, and the volitional, it will not be possible to generate and develop a true human configuration. Feelings and emotions, intertwined with the cognitive and intellectual, will become desires to do and know, attitudes, values, and convictions that will determine the human being who wants to be formed (Ortiz Ocaña, A.; 2021a).

So, the compassionate look is to see things from the perspective or point of view of the other, it is to enter their own world, and it is to try to lovingly put ourselves in their place. It is being open to the interpellation or question of the other: “who am I for you?” Compassion is not reduced to a speech, it is action, and it is liberating praxis. It is not feeling sorry for ideas, but for specific people (Ortega Ruiz, P.; 2021; p. 35). It is to build knowledge from the interaction with the environment, as Bruner thought, or to develop his experience as a human being by combining his own thinking with his affectivity to enrich the meaning of that experience, as Dewey thought.

A CONSTRUCTIVE-EDIFYING PEDAGOGY

Our universities have to promote the acquisition of knowledge and procedures, but simultaneously they must awaken values in young people! Values that allow them to perceive both the benefits of Science and Technology in improving their quality of life, as



well as its negative consequences if there is a lack of morality and ethics in its development. Values must be understood within the complexity that relates Ethics, Morality, Religion, History, and Culture itself. Values are because they are worth and they are worth because they practice it (Rodríguez Echenique, C.; 2018). In Huxley's words, «higher education does not guarantee superior virtue or superior political wisdom» (Huxley, A.; 1958; p. 22).

The constructivist option tries to change the interpretation of the teaching and learning processes, considering that they can be divided into three aspects: learning as the acquisition of answers, learning as the acquisition of knowledge, and learning as the construction of meanings for the knowing subject (Serrano and Pons, 2011). That is an action-oriented pedagogy as a true dialectical exchange between the knowledge of the teacher and that of the student, as was referred previously.

The constructivist pedagogical perspective states that each student must have an educational goal that can be achieved sequentially and progressively. The teacher must create a pleasant environment that facilitates the student's openness to achieve his or her own intellectual development in later stages. From this perspective, the main function of pedagogy is to understand and produce human formation in students (Aguirre-Vidaurre, Ernestina; 2007).

In the constructivist pedagogical approach, the goals revolve around training. The constructivist option is constituted by principles that try to explain how different knowledge is built. These usually organized into two blocks: those related to the construction of meanings and senses, and those related to the modification, construction, and revision of knowledge schemes (Serrano and Pons; 2011).

The university professor must face challenges, he must look for new ways of teaching and learning to develop his teaching work and achieve significant learning in the student body that, as Fröbel proposed, learning based on the interest and actions of the student. The learning content must have an understandable language so that students progressively acquire knowledge through their own findings (Aguirre-Vidaurre, Ernestina; 2007).

Each person perceives reality, organizes it, and gives it meaning in the form of constructs, which contributes to building a coherent whole that gives sense and uniqueness to reality. In summary, knowledge is a construction of the human being and deals with a series of concatenated steps that lead to the integration and organization of contents that will produce the learning that will shape the professional identity. You can talk about learning when there is an appreciable change in people, a change that is lasting over time and results in the personal and edifying growth of the student (Ortiz Granja, D.; 2015).

Within the purposes of education, in the constructivist formation of the student, there must be, and not only highlight the human value of being and preserve humanism in the very action of educating. One of the distinctive characteristics of a constructive-uplifting pedagogy is the absence of a repetitive, inert, and foreign discourse, the message delivered by the teacher must be vital, own, and personal. The message is strengthened by a humanist vision, that addresses and attends to the emerging in which each cultural level must be considered as an educational process, and configured as a space of what is properly educational (Gutiérrez, R.M.; 2022).

All teaching educates in something, educational teaching forms and instructional teaching instrumentalizes. Instructional activities differ from other educational practices because they are designed, planned, and executed with a



defined intention that gives meaning to said activity (Serrano and Pons; 2011). The action of teaching, for a full education, implies recovering the ontological and the axiological as essential. In Latin American conventional education, generally what predominates is the work on the contents that must be taught, and in the application of procedural knowledge, but little in attitudinal knowledge. However, it is precisely in this attitudinal knowledge where the recognition of the presence of the other, their otherness (Ibidem).

By incorporating the spirit of emotion in the classroom, the learning of knowledge and the construction of knowledge that is not relativized is potentiated. The student is able to face the error and reformulate his approach to the world of ideas, processes, experience, and principles. From this aspect, social relationships and interactions are based on positive affective emotions, love, loyalty, and solidarity that are recognized as necessary and fundamental resources for the survival of individuals and groups. Thus, the acceptance of the other is linked to the acceptance of the affective act that approximates and comforts, as the emotion that moves, and is even capable of moving the student (Ibid.).

An education training that respects and accepts the diverse strengthens the very notion of the subject in front of himself. One of the main contributions of constructive-edifying pedagogy may be the search for acceptance, solidarity, and love as emotions that can and should, be present in the classroom and mediate the learning and training processes of students. If education exceeded the instructional limits and strengthened the human, the discriminatory and exclusive limits could be overcome.

In a constructive-edifying paradigm, the student develops a compassionate look towards others, a feeling of Otherness towards his classmates. Education must have as one of its main objectives

the “should be” in terms of harmony, agreement, and acceptance of coexistence between what is different, between “us” and “others”. This implies accepting the responsibility and respect that we owe to “others” as human beings, to nature, and to all living beings, our own and others. For many researchers; the forest, humans, and animals are interdependent, if the forest gets sick, the animals will also be sick, and surely, sick animals will affect the health of humans.

In the words of Rosa Martha:

«Only to the extent that we are capable of recognizing the value of sensitive and emotional training, that is, constructive and edifying. Will we be able to bring students closer to human and disciplinary knowledge; to make artistic, scientific and social developments that transform the world from flexibility, fluidity and originality, fundamental elements of the creative processes of new environments» (Gutiérrez, R.M.; 2022).

The vision of learning for understanding has a constructivist twist, which challenges the idea that learning is only concentrated information. This constructivist turn modifies in a certain way the role of the teacher, who is understood more as a facilitator or coach, and places the student and his efforts to build an understanding of what he has learned as the central axis. Learning what is shown in class comprehensively is not just building a representation that fits what has been learned, it is rather developing a capacity for flexible performance around that topic (Perkins, D.; 1999).

However, the dilemma could be will this understanding, or this built capacity for flexible performance has the edifying capacity to convert the student into a professional with a social and human sense, based on the perspective of otherness, and centered on an ethical relationship with the other.



A COMPREHEND-EDIFYING LOOK

As emphasized by Dr. J.C. Arboleda, it is necessary to bet on pedagogy and didactics that can make educational language, and discipline, an element that generates meanings, a component of reality itself, an integral part of that sensitive reality with human life, a reality that the student can understand in all its significance. Language is the instrument by which the human being communicates and expresses the significance that his environment has for him. Understanding goes from the apprehension of the treated disciplines to the very appropriation of values that allow guaranteeing coexistence through understanding oneself and others. This would allow both conservation and the transformation of reality to facilitate true human and social development to occur (Acosta Ortiz, A.M.; s/f).

It is necessary to speak at school and in daily life, a processed, questioned language that makes sense that is significant for dialogue, to give value to life, and above all to build. The teacher must transmit to his students the ability to feel and think the language, that disciplinary and educational knowledge generate scenarios for an edifying communication, that the contents of the educational activities are understood, not only memorized, so that they can operationalize them, with the necessary flexibility, in their experiential environment (Arboleda, J.C.; 2022a).

Many topics learned by the students are not used to face either real situations or purely academic ones, much less to use what they have learned in order to orient themselves in reality with a critical look that identifies and solves problems, that avoids the complexity and to overcome routine to live productively in their environment, in their community. The student needs to interact with broad conceptual networks, sufficiently organized, with clear examples and generalities that support the topics that are taught and that

allow them to convert or replace the visions that they have built about the world and their peers throughout their lives (Acosta Ortiz, A.M.; s/f).

Physicist Richard Feynman asserted that the goal of teaching should not be to help students memorize and repeat information under academic pressure, but to inspire in them the desire to learn and make them capable of thinking, understanding, and questioning. For his part, Gadamer, a German philosopher, believed that what must be formed is man, both in his understanding, in his senses, and morally (Gadamer, H-G.; 2000; pp. 123-131).

Learning by repetition is not enough; the teacher must develop critical and reflective thinking, as well as empathy and tolerance, in their students. As expressed by Bocanegra Vilcamango, B.; et al.; 2021:

«Teacher training implies having developed critical thinking about didactic strategies so that, in practice, they help to better develop the teaching-learning process in a reciprocal way, since learning not only translates or generates changes in the student, but also in the teacher».

In training for life, more than competence as potential, understanding as a human endowment that involves knowledge, critical-generative reflection, and experience is more important. Training that, as an interdependent world of knowledge, attitudes, skills, values, reflections, and applications, is focused, above all, on an edifying understanding. Understanding that manages to build, and train for life, through which such comprehensive language becomes a work of life (Arboleda, J.C.; 2022a).

Educate for precise life, from school, scenario orientation to affirm the diversity of life. It is necessary to recognize and dignify the territories as an interrelated complex of bodies, spiritualities, worldviews, and diverse cultures,



where educational agents know others and live the experience of knowing how to be another, of sentient reason, of welcoming the other in otherness. It is necessary to connect the student with life. They must learn and think by experiencing so that they not only understand but also feel those understandings and can use them in an edifying way. With an experiential sense, that allows them to be, or know how to be; testimony, work of life, honor, care, and nurture their own life and that of others (Arboleda, J.C.; 2022b).

For Professor Julio César Arboleda, it is essential that the student not only understand what he receives in the Teaching-learning process, but he also needs to understand, he needs to evaluate what he has learned in different contexts and transform the information received into his own knowledge. It must be the protagonist in the generation of more dignified and better worlds. You must apply your potential to conceptually and operationally appropriate knowledge and use it in an edifying way in your life experience; current education must implement that comprehend-edifying perspective. Because this comprehend-edifying pedagogical vision promotes the integral formation of the student so that they can act and live with dignity, ethical values, and an aesthetic attitude, which requires that they be able to apply knowledge in different contexts, but with a human sense (Arboleda, J.C.; 2014).

For David Perkins, understanding is not reduced to knowledge; it is more than a well-automated routine skill. The student who skillfully solves problems or writes paragraphs with logical sentences may understand almost nothing about physics, writing, or what by himself was written about. Knowledge and skill can be translated as information and routine performance, but understanding eludes these simple rules. For this author, comprehension performance is

activities that go beyond memorization and routine (Perkins, D.; 1999).

When asked what are comprehensions? A simple answer might say is the ability to think and act flexibly, based on what one already knows. When a student cannot go beyond rote memorization, thought, and action, this indicates a lack of understanding. As Perkins said:

«Understanding a topic means nothing more and nothing less than being able to perform flexibly in relation to the topic: explain, justify, extrapolate, link, and apply in ways that go beyond routine knowledge and skill. Understanding is a matter of being able to think and act flexibly from what one knows. The capacity for flexible performance is comprehension».

Conceiving comprehension as the learner's ability to use their own knowledge in new ways in different contexts, for pedagogy, its implications may seem simple, that is, teaching for comprehension would imply engaging learners in comprehension performances. However, the history of attempts to teach for understanding has shown that the task is much more complex. A pedagogy of understanding needs more than insight into the nature of understanding and its development. It needs to engage students in comprehension performances that require them to apply, extend, and synthesize what they know in any given context or situation (Stone Wiske, M.; 1999).

In the so-called "Knowledge Society", radical changes are taking place in theories considered valid explanations of man and the world, which previously remained immovable for centuries (Rodríguez Echenique, C.; 2022). Paradigms change very quickly, and despite the accumulated knowledge, it has not been possible to stop the world crisis; there is further deterioration of the planet, of man and his values, and of the relationships between men themselves. The



environmental situation in Latin America and the Caribbean has been referred to by ECLAC as increasingly worrying. Since, despite being a region rich in natural resources and biodiversity, it is witnessing how its deterioration progresses rapidly and inexorably (Gligo, N., et al.; 2020).

THE MESOAXIOLOGICAL PERSPECTIVE

According to Touriñán López, knowing, teaching, and educating does not mean the same thing. In order to teach, in addition to knowing, it is necessary for the student to be able to do what is necessary so that he or she gets to know and act accordingly. To educate you have to go a step further because there are teachings that do not educate, they only inform. The objective of knowing is to get to knowledge, and the objective of teaching is to make the other know and act accordingly. The objective of educating is to enable the student to decide and carry out his own projects, to make this student become an acting agent and, simultaneously, the author of such projects (Touriñán López, J.M. 2022a).

Teaching is not simply transferring knowledge, but creating the possibilities to facilitate its own production or construction by the student based on the information received (Freire, P. 2006, p. 47). Knowledge of education and pedagogical knowledge does not mean the same thing. Without the common daily activity, it is not possible to educate if you want to make effective the passage from the information provided to knowledge, to action in each field of education built. In the educational relationship, work must be done in accordance with educational values, but also with feelings (Touriñán López, J. M.; 2021a).

For Professor J.M. Touriñán López, each cultural area of a given country or region has to be valued as education and built as an area of education, he has called that “mesoaxiological perspective”, the professor defines it a term that is born from the conjunction of three Greek

words and that translates into understand-local place and valorized. This is what all science that involves intervention does; it goes from knowledge to action. From the mesoaxiological perspective, it is necessary to understand the available means and assess them from their very field of intervention (Ibidem).

The common activity is exercised in any of the technical meanings of a cultural area as an area of education; the knowledge of education and the common activity are necessary means to educate the cultural area. As expressed by Dr. Touriñán López, is necessary to educate “with” the cultural area and this requires exercising the pedagogical function with competence, establishing an educational relationship in which knowledge of education and common activity are necessary means (Touriñán López, J.M. 2022b).

The very knowledge of education creates the possibility of building educational environments integrated with cultural areas and establishing an educational relationship where the everyday is turned into a work tool. This makes it possible to transform information into knowledge and that same knowledge into education. With this mesoaxiological perspective, the student thus becomes an actor of his time. Moreover, it is that Education, in its full sense, does not reach its objective if it only develops a man capable of fending for himself and only for himself. Education is culture, therefore, it can be affirmed that the function of the education profession is to transmit culture, and knowledge of the various cultural areas thus becoming the axis of all pedagogical activity (Ibidem).

For Professor Touriñán, the pedagogical function is technical, not political, although education is a matter of political interest. It is necessary to take into account that Pedagogy is knowledge of education, that is, it is simultaneously techno-axiological and mesoaxiological. Techno-axiological, because education is understood



as a technical decision, its ends and means are based on knowledge of the field that is chosen and where it is exercised. Nevertheless, simultaneously it is mesoaxiological because transforms content from a cultural area into an educational field. That is, the understanding of the environment in which one acts is valued as educational. This is equivalent, based on the medium or instrument used (meso), to value it as educational (axio), and finally, to understand it, that is logos. This identification as an area of education contributes to forming criteria in education professionals about the educational value of their cultural area and its possibility as pedagogical knowledge (Tourrián López, J.M.; 2020).

Didactics is understood as a universe of theoretical, meta-theoretical, and practical knowledge applied or praxis, to teaching, training, and learning situations in a school environment so that the student appropriates knowledge, concepts, ethical values, and attitudes, and transforms into their own knowledge in a temporary and contextually given space (Arboleda, J.C. 2020).

As Professor Arboleda had previously expressed, it is an urgent need to know how to teach while educating, and influencing the formation of constructive, comprehensive, edifying, critical-acting learning, by virtue of which the educable subject contributes to the construction of better worlds (2015).

The concept of Moral, as mentioned above, designates the set of values, norms, and customs established or proposed by men. However, morality is a harmonic orientation that helps us to live. It is respect and the fight every day for what is right. Nevertheless, «Ethics is the philosophical reflection on the actions of man as a man and does not admit exceptions in favor of anyone or of any private interest» (García Morente, M.; 1980; p. 14).

It is to be expected that all the knowledge, which makes up the didactic complex, contribute to the educational life project under moral and ethical principles with humanizing objectives. It is necessary that, beyond learning and knowledge, it is taught by educating and promoting formative learning, which empowers educational agents, teachers, and students, as better human beings (Bocanegra Vilcamango, B., et al.; 2021).

Critical thinking, a faculty with a high cognitive level, is what will help to define the ontological nature of what is apprehended and to use it pragmatically. In other words, that what is apprehended demonstrates that it is useful to solve problems when put into practice. This critical thinking can be stimulated when the teacher promotes it by analyzing with his students and interpreting with them, the different sources of information, specialized or daily temporary, that he shares in class (Ibidem).

Through pedagogical intervention, knowledge of cultural areas, specific to each country or region, is transformed into education. All temporary training orientation combines tradition and innovation, and cultivates the personal with the commitment to the future; this must be the framework, in which the aims of education move for the social expectations of our region. According to Tourrián López; the quality of education depends, to a large extent, on the quality of education professionals and the quality of these professionals also depends, to a large extent, on the knowledge of the education they have received in their training (Tourrián López, J.M.; 2021b).

The temporary formative orientation is directed to the human condition, to the type of people that you want to train in a given space-time, it is the educational model or pattern of that particular society (Tourrián López, JM 2019a). This can be a bulwark for the so-called decolonization of Pedagogy that several authors have formulated (Ortiz Ocaña, A.; A. Maloof and H. Mejia.; 2021).



Therefore, it is necessary to take into account that not everything traditional is rejected, nor only any knowledge innovations must be preserved (Touriñán López, J.M.; 2021b).

The knowledge of education is, therefore, a specific knowledge, based on specialized knowledge that allows explaining, interpreting, transforming, and deciding the intervention of the pedagogical function for which it trains, whether it is a teaching function, support for the educational system, or educational research. The teaching function requires mastery of skills, habits, attitudes, and knowledge that enables him to teach. Those that support the educational system are not directly concerned with teaching, since their task is to solve pedagogical problems in the educational system. Finally, the pedagogical research functions are identified as the exercise and mastery of skills, habits, attitudes, and knowledge that enable to validation and develop explanation, interpretation, and transformation models of educational events (Touriñán López, J.M. 1991).

If the aforementioned pedagogical functions were fully developed in our countries, born a culture of Alterity, compassion, creation, and a comprehensive uplifting among students with a mesoaxiological perspective. Then is very likely that violence, bullying, exclusion, and lack of solidarity would disappear from our lives in classrooms. Then, the ideas of Pestalozzi, Rousseau, and Comenio would realize, since Education would be precisely the solution to poverty and the contradictions of our society.

INTERNATIONALIZATION OF HIGHER EDUCATION

In the last decades of the last century, a Western version of the University began to consolidate as a professional and intellectual institutional model for countries that wanted to modernize. International agencies and private foundations began to compete to attract students and

institutions dedicated to the training of professionals and researchers emerged with the aim of reducing technological and knowledge gaps (Oregioni M.S.; Piñero F.J.; 2015).

However, it must be taken into account that, internationalization, as a concept, is multidimensional and complex. By seeking the creation of a world academic model. Which is directed by the interconnected global academic market; with English as an international language. Where Higher Education Institutions (HEIs), develop global teaching-learning strategies, in order to associate and harmonize titles and academic degrees, in practice, a hegemonic process that can be imposed by non-international actors (exogenous) or for economic reasons (commercial) (Andrés, Mercedes V. 2018).

If higher education were conceived as a simple reproduction of functional knowledge for a globalized culture, both the university and education as a whole would run the risk of becoming a provider of the workforce. Our institutions would be working at the service of the market that sustains and feeds back a certain culture, but that generates many dependencies and very little progress for its own environment.

If that is the conception of our education systems, the internationalization of universities should adhere to hegemonic trends, seeking to generate utilitarian knowledge for the market. Would generate networks from the periphery to the center, and exchanges with universities essentially from the United States and Europe. Even also would exert pressure to publish in central publishers and with a high level of impact due to their level of consultations and citations. Nevertheless, the danger of this line of thought, for Latin America, lies in the fact that all the knowledge generated and accumulated by Latin American researchers would have greater visibility, yes good, but at the price of directly



favoring the interests of the central powers, and not of our nations. (Bas Vilizzio, M. 2016).

The scientific model of modernity has been implanted in association with the mercantilist domination structure. In addition, the cultural scientific project was established together with the apparatus of economic domination. As consequence, the high values of Science and Culture are transferred to the economic value as the main rector, stripping them of humanism, solidarity, equity, and horizontality in the relations and processes of knowledge production. The foregoing is increasingly promoting the strengthening of cognitive inequality in accordance with the economic inequality of our countries (Duquino, Luis G. and Fabio A. Vinasco; 2018).

Latin American research must therefore imply the use of a new epistemic and methodological base, conformed to the reflexive structure of emerging paradigms and an «epistemology of the south». Epistemology is based on the need to transcend the universalism of the modern Western paradigm and give way to a culture of the diversity of forms of production of knowledge. Unquestionably, minds would be open to intercultural translation processes needed, which can provoke and maintain knowledge dialogue processes, as well as transcribe the complex and valuable forms of thought production and ancestral knowledge made invisible with the implantation of colonial modernity. (Ibidem).

Ortiz Ocaña and Arias López reflect on what has been called the urgency of “decolonizing” the social sciences. For these authors, it is necessary to create “other” ways of thinking, feeling, and existing. Creating new types of knowledge and new “sciences”, whose structure is based on the knowledge of the other, often considered inferior, and not on a modern/colonial epistemology that considers that Europe and its culture have been the center and engine of civilization and that

therefore must be considered as superior (Ortiz Ocaña, A. and Arias López, M.I.; 2019).

Of course, the new epistemic and methodological attitude implies a serious and deep commitment on the part of the researchers, who must acquire responsibilities in terms of a clearly active and cooperative position in solving the contemporary problems of our peoples and communities, many times, marginalized. Only in compliance with such premises, investigations would be viable that contribute to the processes of social change that Our America has aspired to for centuries (Duquino, Luis G. and Fabio A. Vinasco; 2018).

As affirmed Brenda Iglesias: pausing ourselves in the Latin American feeling-thinking is an intellectual exercise that invokes not only the change of paradigms but also the proposal of strategies and statements to promote the spirit and the re-conquest of the illusion as builders of the contemporary world, in the same epistemic act and of action. After all, we recognize ourselves geographically and politically as a macro-region that encompasses a subcontinent, that shares the same original and civilizational history (Iglesias Sánchez, Brenda U.; 2019).

Moreover, the educational sciences are immersed in an epistemic, epistemological, and even ontological revolution. Pedagogy is developing rapidly, expanding and diversifying, drawing on other sciences such as Psychology, Sociology, Anthropology, and even neuroscience and their different branches, whose findings in recent years cannot be ignored in educational institutions. For Ortiz Ocaña, teachers should not reverence, but neither should they reject the theoretical contributions that come from all these sciences, but must integrate them in a creative, harmonious, and coherent way in their daily pedagogical practices and in line with our cultural reality and Latin American identity (Ortiz Ocaña, A.; 2021b).



Therefore, it is considered that education professionals should carry out teaching functions, pedagogical functions in support of the educational system, or projection towards Society, and research functions, always with the ultimate objective of educating in each of these substantive functions of higher education. Teachers must have pedagogical knowledge and curricular skills to be able to teach the current generations meaningfully and emotionally if we want to train worthy professionals who make our beautiful countries of the South great. In many institutions, there is time for planning, and time for action, but little time for reflection on their actions. In this way, it is easy for routine to acquire a determining weight in institutional practices (Ibidem).

Internationalization should be seen as a process that accelerates the reduction of the existing cognitive and technological gap between our countries and the more developed ones, but seeking our own development, not trying to match the way in which the most economically developed do. If we want our own development, university students must know how to handle the epistemological bases that sustain and articulate the substantive functions of Higher Education and convert the flow of information that they handle into knowledge that allows them to be builders of the socioeconomic transformation which our Latin American countries claim (Rodríguez Echenique, C.; 2022).

ADVANCES IN TECHNOLOGY IN THE EDUCATIONAL FIELD

It is true that competitive advantages, nowadays, depend more and more on knowledge and technological innovations. Technological products are designed that seem to be taken from science fiction writings, in fact, the world already has programs designed to perform certain operations of human intelligence, call it: "artificial intelligence", but it will hardly

develop machines that have "artificial creativity" (Rodríguez Echenique, C.; 2023).

In relation to Artificial Intelligence (AI), relatively recently, some questions have been raised about GPT Chat and its impact on Education, since with the appearance of AI, some alternatives have emerged that allow the generation of content to maintain natural conversations. Chat GPT, (Generative Pre-trained Transformer), is defined as a generative language model that processes sequences of elements, such as words in a sentence, using transformations. This application can affect all jobs and businesses that involve the creation of content in various multimedia formats (text, images, audio), and it will probably also have a drastic impact on the educational field, where it undoubtedly presents a practical challenge in its inclusion in the Teaching-learning system.

This model is capable of processing large amounts of text and learning to perform language-processing tasks, but to work, GPT needs to be "trained". From this text, the model learns to perform natural language processing tasks and generate related fairly well-written documents. To use GPT in a chat, you are given input in the form of text. This input can be in the form of a sentence or question in a context. In addition, from this input, GPT generates an appropriate and relatively consistent response.

Among the different applications, the production of texts such as essays, monographs, final works, dissertations, and these are relevant elements in the educational field and a basic tool in the evaluation process. All this tradition is about to be changed, since, with Chat GPT, you only have to ask a question to receive an answer in just a few seconds. Students can use this resource to solve their doubts, write a summary of a text that allows them to investigate more quickly, or present a representation of a possible exam. Teachers, for his part, can use Chat GPT to help them make a well-done lesson



planning; or to advise them when designing an exam assignment; or to create practical cases to work on in the classroom.

Given this panorama, a part of the educational system is positioned against these tools, opposing their inclusion in the teaching process. However, others support the inclusion of AI in the Teaching-learning processes. In any case, technological innovations are going to change society, so education must include these new tools. Otherwise, students are able to use them correctly and can extract their full potential. Excluding these technologies from educational practice only slows down school activities, since the student is used to interacting in their immediate environment, where technologies are used on a daily basis.

According to Nature Briefing (January 20, 2023), some scientists have begun using generative artificial intelligence (AI) systems to write and edit manuscripts, verify their code, and generate ideas. Even ChatGPT has been listed as a co-author on four articles and preprints. This is why publishers are beginning to ban AI authoring because they cannot take responsibility for the content and integrity of an article. Because of this, some publishers say that the use of the chatbot should be documented in the methods or acknowledgments sections and that failure to do so could be considered plagiarism. Hence, enthusiasm for the use of such tools is being tempered by the propensity to make factual errors, reproduce biases in the data, and even provide material for falsification and plagiarism.

If effective learning, centered on the student, prevailed in our classrooms with a perspective of otherness, compassion, and edifying collaboration among classmates. If everyone's motivation arises from the fact of learning and not because of an external incentive such as testing and grading, the technology would likely be used to reinforce knowledge gained and shared, not to try to get fraudulent grades.

Then, our Latin American classrooms could educate with this triumphant love formula from Martí: «With everyone and for the good of all» (Martí, José; 1975).

SCIENTIFIC RESEARCH IN EDUCATION

It is imperative that scientific research be a transcendental component and, in addition, a transversal component of the university curriculum, capacity and mastery of instrumental resources are needed as an important part of professional training, since one of the functions of the University is to create knowledge! For this, the management of epistemological conceptions, by educators and students, is fundamental by virtue of its influence on the teaching-learning process and on the research culture itself (Rodríguez Echenique, C; 2018).

According to Cesar Augusto Bernal: Epistemology calls for reflection on Science and its language. Is essential for professionals and academics, who must have the ability to give a critical opinion, based on moral, ethical, cognitive and reflective conditions, on aspects that they face daily in a society that is increasingly more participatory, where goodwill is not enough (Bernal, C. A.; 2010; p. 43).

Epistemology, as a theory of scientific knowledge, deals with problems such as the historical, psychological, and sociological circumstances that lead to obtaining this type of knowledge, and the criteria by which it is justified or invalidated. When speaking of Epistemology, from a contemporary conception, it is understood as a study of the nature of scientific knowledge and the circumstances of its production. In other words, it is essentially the critical study of the principles, hypotheses, and results of the various sciences, to determine their origin, their value, and their objective content (Barreto Tovar, CH; et al.; 2006).



Science does not remain basic indefinitely, sooner or later, it is converted into applied science and finally into technology. Theories are modulated into industrial practice and then knowledge becomes power (Huxley, A.; 1958; p. 57). Research is an indispensable organizational process of the operations involved in scientific creation. Scientific work is actually a set of knowledge, strategies, and basic skills. Investigating is practical knowledge (Sánchez Puentes, R.; 2014; p. 171); it is knowing how to do something: produce knowledge! «Just as houses are made of stones, Science is made of facts; but a pile of stones is not a house and a collection of facts is not necessarily Science» (Poincaré, H.; 2019; Famous Phrases).

Latin American professionals must be able to create and produce the scientific-technical knowledge that Latin America needs and not only adapt what has been produced in other latitudes. The creation of high-quality scientific knowledge, technologies, and innovations is the necessary platform for the social, industrial, economic, cultural, and political development of today's Society. Only a realistic Epistemology «will be able to inspire a fruitful policy of Science that promotes the uninterrupted development of scientific creation» (Bunge, M.; 2004; p. 17).

FINAL WORDS

In a world of permanent scientific-technical inquiry, scientific training is a necessity. «Teachers must face the challenge of training all citizens of the 21st century and not only professionals» (Vilches, A. and C. Furió; 1999).

It is a dangerous idea that of contents for contents, of observation for observation of the material, visible, tangible object, of learning for the exclusive enrichment, to boast of knowledge and its possession, but not what is really important, of the feeling or sentient thinking, which is the truly human (Giraldo Henao, L.A.; 2022). Education that does not take into account

the satisfaction of internal growth, solidarity, critical thinking, and the collective strengthening of the nation in its diversity, will not be able to develop all its potential, nor will it be able to manifest them in any international (Arboleda, J.C.; 2020).

The professional's current dilemma lies in the fact that the extremes of the void that he hopes to fill with his profession are changing rapidly: at one extreme is the body of knowledge that he must use and at the other, the expectations of his Society. Nevertheless, the changes in both have their origin in the same common factor: technological change (Rodríguez Echenique, C. 2018).

Why do not advance genuine educational processes around the dignity of the human being and the social construction of realities? Why not educate for a type of man who raises awareness of the contents apprehended in relation to life and who combines knowledge with pleasure in the search for the common good? Why not look for a type of society and a type of person, although a technologized man; knows how to distinguish human composition from technological automatism? (Giraldo Henao, L.A.; 2022).

In a globalized world and an internationalized education, perhaps the compassionate look, the uplifting comprehension, and mesoaxiological perspective, or even a Pedagogy of "otherness", are what preserves us as human beings (Arboleda, J.C.; 2015). Our young people must be trained in values and as thoughtful agents of change, capable of applying all their strength to improving our lives and perfecting the world in which they live! (Masferrer Alberto, 2019. Vol. 1 page 228).

BIBLIOGRAPHIC REFERENCES

in alphabetical order. -

- Acosta Ortiz, A. M. (s/f). Enseñanza para la comprensión pp. 229-266, en: Enfoques pedagógicos y didácticas contemporáneas; M de Zubiría Samper, director; Fundación Internacional de Pedagogía Conceptual Alberto Merani, Colombia.
- Aguirre-Vidaurre, Ernestina (2007). Enfermería en Costa Rica. Vol. 28(1): 29-32
- Andrés, Mercedes Victoria. (2018). Regionalización de la Educación Superior en Sudamérica como Estrategia alternativa a la Internacionalización Hegemónica; en: María Soledad Oregioni y Ana María Taborga, (Coordinadoras). Dinámicas de Internacionalización Universitaria en América Latina. 1a ed. - Tandil: Grafikart)
- Arboleda, J.C. (2014). La pedagogía de la alteridad en la perspectiva de la comprensión edificadora; Memorias Simposio Internacional de Educación y pedagogía de la alteridad: Educación y pedagogía de la alteridad, Editorial REDIPE, Universidad de Murcia
- Arboleda, J.C. (2015). Formación para la vida: De las competencias a la comprensión edificadora; Reseña Revista Virtual REDIPE: Año 4 Volumen 12
- Arboleda, J.C. (2020). Hacia una didáctica comprensivo edificadora. En: A. Medina Rivilla, A. de la Herrán Gascón y M. C. Domínguez Garrido (Coords.), Hacia una didáctica humanista (pp. 389-460). Madrid: REDIPE-UNED
- Arboleda, J.C. (2022a). La escuela para la vida; en: Sujeto de la educación, credibilidad y acoso escolar; Revista-Boletín REDIPE: Vol. 11 (07) pp. 15-23
- Arboleda, J.C. (2022b). Formar para la vida y no exactamente para el consumo competencial; en: El legado de nuestros mayores, formación y praxis pedagógica; Revista-Boletín REDIPE: Vol. 11 (08) pp. 15-26
- Arboleda, J.C. (2022c). Docencia, formación y Humanismo ético; Revista-Boletín REDIPE: 11 (09) pp. 15-24
- Barreto Tovar, C. H., Gutiérrez Amador, L. F., Pinilla Díaz, B. L., & Parra Moreno, C. (2006). Límites del constructivismo pedagógico. Educación y Educadores, 9(1), 11-31.
- Bas Vilizzio, Magdalena. (2016); Fortalezas y debilidades de la internacionalización de las universidades latinoamericanas en la región: un abordaje desde las tres antinomias de Bruner; pág. 197; Capítulo IX; en: Piñero, F. J.; Oregioni, M. S. 2016. Herramientas de Política y Gestión para la Internacionalización Universitaria: una mirada Latinoamericana; 1ra. Edición.
- Bernal, César Augusto. (2010). Metodología de la Investigación; Tercera Edición; p. 43; Editorial Pearson Educación; Colombia
- Bocanegra Vilcamango, B.; J.J. Tantachuco Ñañez y N.J. Caballero Martínez. (2021). Desempeño docente y pensamiento crítico en la formación universitaria; Revista boletín REDIPE 10 (2): pp. 65- 77



- Bravo Reinoso, Pedro (2014). Pedagogía de la alteridad. Cuestionamientos a la ontología de la educación. *Sophia: colección de Filosofía de la Educación*, 17(2), pp. 123-138.
- Bunge, Mario. (2004). *Epistemología*; 4ta Edición; Prefacio de la Primera Edición; p. 17; S XXI S.A. de C.V.; México
- Camargo Uribe, A y Christian H. Martínez, (2010). *Psicogente*, 13 (24): pp. 329-346.
- Cañaverall Bermúdez, L.J.; A.S. Nieto Dionicio y Vaca Ocampo, J.H. (2020). El aprendizaje significativo en las principales obras de David Ausubel: lectura desde la pedagogía; Trabajo de Tesis; Universidad Pedagógica Nacional, Bogotá, Colombia
- Díaz Alvarado, Berenice. (2017). La escuela tradicional y la Escuela nueva: Análisis desde la Pedagogía Crítica; pág. 28 y pág. 114; Tesis de Licenciatura; Universidad Pedagógica Nacional; México
- Duquino, Luis G. y Fabio A. Vinasco (2018). Investigación y transformación. Por una ciencia latinoamericana inscrita en la epistemología del sur; en: Sandoval Foruro, E.A.; F. Proto Gutiérrez y J.J. Capera Figueroa; Coordinadores. *Discusiones, problemáticas y sentipensar latinoamericano*; Tomo I - *Pensamiento Crítico Latinoamericano*; 1ra. Ed.; Buenos Aires - México D.F.
- Freire, P. (2006). *Pedagogía de la autonomía: saberes necesarios para la práctica educativa*. México; Siglo XXI Editores S.A.
- Friedman, Thomas L. (2007). *La Tierra es plana, breve historia del mundo globalizado del siglo XX*; trad. Inés Belaustegui; 7ma. Edición; Ediciones Martínez Roca, S.A; Madrid, España
- Gadamer, Hans-Georg. (2000). *El hombre y la mano en el actual proceso de civilización*; pp. 123-131; en *Elogio de la Teoría: discursos y artículos*; trad. Anna Poca Casanova; Ediciones Península, Barcelona, España
- García Morente, Manuel (2006). *Lecciones preliminares de Filosofía*; pág. 21; Grupo editorial Tomo S.A. de C.V.; México
- Giraldo Henao, L.A. (2022). La pedagogía de las cuatro "P", hacia una perspectiva filosófica y discursiva en tiempos de Pandemia; *Revista boletín REDIPE* 11 (6): 59-72
- Gligo, N., et al. (2020). La tragedia ambiental de América Latina y el Caribe, *Libros de la CEPAL*, N° 161 [LC/PUB.2020/11-P], Santiago, Comisión Económica para América Latina y el Caribe [CEPAL]
- González-Monteagudo, J. (2001). *John Dewey y la Pedagogía Progresista*; Cap. del libro: J. Trilla (Coord.). *El legado pedagógico del siglo XX para la escuela del siglo XXI*. Barcelona, España
- Goñi Camejo, Ivis. (2000). Algunas reflexiones sobre el concepto de información y sus implicaciones para el desarrollo de las ciencias de la información; *ACIMED* 8 (3): 201-7; documento disponible en: <http://scielo.sld.cu/pdf/aci/v8n3/aci05300.pdf>; [Consultada 22/01/2019]



- Gutiérrez Ávila, J.H.; G. de la Puente Alarcón; A.A. Martínez González y E. Piña Garza (2012). Aprendizaje basado en problemas. Un camino para aprender a aprender. UNAM; México D.F.
- Gutiérrez, Rosa Martha (2022). La pedagogía constructivo edificadora y la formación del sujeto en la educación; Revista Boletín REDIPE 11 (7): 56-83
- Harari, Yuval N. (2018). 21 lecciones para el siglo XXI; Traducción: Joandomènec Ros i Aragonès; Penguin Random House, Grupo Editorial; USA
- Huxley Aldous. (1958). Nueva visita al Mundo feliz; pág. 57; documento disponible en: <http://LeLibros.org>; [Consultada 16/08/2019]
- Huxley Aldous. (1958). Nueva visita al Mundo feliz; pág. 22; documento disponible en: <http://LeLibros.org>; [Consultada 16/08/2019]
- Iglesias Sánchez, Brenda U. (2019). La otra Latinoamérica; en: Sandoval Foruro, E.A.; F. Proto Gutiérrez y J.J. Capera Figueroa; Coordinadores. Discusiones, problemáticas y sentípensar latinoamericano; Tomo I - Pensamiento Crítico Latinoamericano; 1ra. Ed.; Buenos Aires - México D.F.
- Martí, José. Obras Completas, Tomo IV pp. 269-279 (1975); Discurso pronunciado en el Liceo Cubano. Tampa, 26 de noviembre de 1891
- Masferrer, Alberto. Obras Completas. (2019). Las nuevas ideas (1913); pp. 213-233; Vol. 1; Masferrer Editores; El Salvador; Centroamérica
- Oppenheimer, Andrés. (2019). ¡Sálvese quien pueda!: El futuro del trabajo en la era de la automatización; Debate; Penguin Random House Grupo Editorial; USA
- Oregioni M. S.; Piñero F. J. (2015). Redes de producción y difusión de conocimiento: ¿Un instrumento para orientar la internacionalización de la Universidad Argentina hacia Latinoamérica?; en: Aportes para los Estudios sobre Internacionalización de la Educación Superior en América del Sur. (Argentina): Universidad Nacional del Centro de la Provincia de Buenos Aires.
- Ortega Ruiz, P. (2020a). La otra educación moral. Revista Boletín REDIPE 9(5): 24-35
- Ortega Ruiz, P. (2020b). Educar desde la experiencia ética del otro; pp. 18-19 en: Colección internacional de investigación educativa - Tomo 22; REDIPE
- Ortega Ruiz, P. (2021). La mirada compasiva; Revista boletín REDIPE 10(8): 32-42
- Ortiz Granja, Dorys (2015). El constructivismo como teoría y método de enseñanza; Sophia, Colección de Filosofía de la Educación, núm. 19, pp. 93-110
- Ortiz Ocaña, A. y Arias López, M.I. (2019). Hacer decolonial: desobedecer a la metodología de investigación. Hallazgos, 16(31), 147-166. Colombia: <https://doi.org/10.15332/s1794-3841.2019.0031.06>.
- Ortiz Ocaña, A. (2021a). Modelos educativos y tendencias pedagógicas: la pedagogía del amor; Revista Boletín REDIPE 10(12): 58-87).



- Ortiz Ocaña, A. (2021b). Modelos educativos y tendencias pedagógicas: La pedagogía del amor; pp. 16-33; en: Potenciales para el aprendizaje y el desarrollo socio-afectivo; Red Iberoamericana de Pedagogía; 1ra edición; ISBN: 978-1-951198-77-0
- Ortiz Ocaña, A.; A. Maloof y H. Mejía. (2021). Decolonizar las ciencias de la educación: pedagogía, altersofía y hacer educativo decolonial; Revista Boletín REDIPE 10(12): 58-87
- Perkins, David. (1999). ¿Qué es la comprensión?; Parte I, Cap. 2; pp. 69-80 en: Martha Stone Wiske (comp.) La enseñanza para la comprensión-Vinculación entre la investigación y la práctica; Editorial PAIDOS, Argentina
- Poincare, Henry; (2019). Frases célebres 1828-1892; documento disponible en: <http://www.frasesypensamientos.com.ar/autor/henri-poincare.html>; [Consultada 17/04/2019]
- Rodríguez Echenique, C. (2018). Epistemología para Universitarios; Masferrer Editores, El Salvador
- Rodríguez Echenique, C. (2021). De una Gnoseología hacia una Epistemología. La Sociedad del Conocimiento en la realidad salvadoreña: una visión somera; Revista Ateneo de El Salvador, Época XIX, Año 1, Vol. 2; p. 39
- Rodríguez Echenique, C. (2022). La sociedad del conocimiento en la realidad centroamericana: una mirada mesoaxiológica y comprensivo edificadora Revista Boletín REDIPE 11(8): 106-123
- Rodríguez Echenique, C. (2023). What We Believe Is Imperative for Education in Latin America. Education Journal; Vol. 12, No. 2, pp. 59-62. DOI: 10.11648/j.edu.20231202.12
- Ruiz, Guillermo (2013). La teoría de la experiencia de John Dewey: significación histórica y vigencia en el debate teórico contemporáneo. Foro de Educación, 11(15), 103-124.
- Sánchez Puentes, Ricardo. (2014). Enseñar a investigar. Una didáctica nueva de la investigación en ciencias sociales y humanas"; p. 171; Instituto de Investigaciones sobre la Universidad y la Educación; UNAM; México
- Sebastián, Jesús y R. Barrere. (2018). Internacionalización de la investigación en América Latina y el Caribe; Capítulo V; p. 113; en: Gacel-Ávila, Jocelyn, Coordinadora; "Educación superior, Internacionalización e Integración en América Latina y el Caribe. Balance regional y prospectiva"; UNESCO – IESALC y UNC
- Serrano, J. M. y Pons, R. M. (2011). El constructivismo hoy: enfoques constructivistas en educación. Revista Electrónica de Investigación Educativa, 13(1). en: <http://redie.uabc.mx/vol13no1/contenido-serranopons.html>; [Consultada 07/03/2023]
- Siciliani, Barraza, J.M. (2014). Contar según Jerome Bruner. Itinerario Educativo, XXVIII (63), pp. 31-59.



- Stone Wiske, Martha. (1999). ¿Qué es la enseñanza para la comprensión? Parte II; Cap. 3; pp. 95-125 en: Martha Stone Wiske (comp.) La enseñanza para la comprensión-Vinculación entre la investigación y la práctica; Editorial PAIDOS, Argentina
- Torras, Luis. (2018). Comentario; documento disponible en: <https://medium.com/@TorrasLuis/gracias-por-llegar-tardela-tierra-a%C3%BAAn-m%C3%A1splanas-55bf5cf02675>; 2018; [Consultada 17/07/2019]
- Touriñán López, J. M. (1991). Conocimiento de la educación y función pedagógica: el sentido de la competencia profesional.
- Touriñán López, J.M. (2020) Conocer, enseñar y educar tienen distinto significado, la diferencia permite hablar con sentido de enseñanza educativa. Una mirada mesoaxiológica. Revista-Boletín REDIPE 9 (6): 30-41
- Touriñán López, J.M. (2021a) El concepto de educación-La confluencia de criterios de definición, orientación formativa temporal y actividad común como Núcleo de contenido de su significado"; Revista boletín REDIPE 10 (6): 33-84
- Touriñán López, J.M. (2021b). Construir educación de calidad desde la Pedagogía exige ejercer la función pedagógica a través de la actividad común en cada interacción; en: SI(e)TE. Educación. La calidad de la educación; Barcelona: Horsori, pp. 93-120.
- Touriñán López, J.M. (2022a). Construyendo educación de calidad desde la pedagogía. Sophia, colección de Filosofía de la Educación, 32, pp. 41-92.
- Touriñán López, J.M. (2022b). Conocimiento de la educación y actividad común. Construyendo ámbitos de educación desde la pedagogía. Utopía y Praxis Latinoamericana. Año: 27, No. 96
- Úbeda Sánchez, Isabel del Pilar. (2018). Aportaciones Pedagógicas al desarrollo de la Educación Infantil. PublicacionesDidacticas.com; No. 90; pp. 500-507
- Vázquez Fernández, Adrián. (2014). Tres conceptos de alteridad: una lectura actitudinal. Revista Internacional de Filosofía, nº 61, pp.: 75-91
- Vilches, Amparo y Carlos Furió. (1999). Ciencia, Tecnología, Sociedad: Implicaciones en la Educación Científica para el Siglo XXI; I Congreso Internacional "Didáctica de las Ciencias" y VI Taller Internacional sobre la Enseñanza de la Física; Ciudad de La Habana, Cuba