ΣΟΦΙΑ–SOPHIA

DOI: http://dx.doi.org/10.18634/sophiaj.14v.2i.852

School environments: a space for recognition and respect for diversity *

Indira Carolina Arias Vinasco**

* This article is the product of a deepening study: "School and coexistence: the management of school environments for recognition and respect for diversity through IAP strategies, case of the Educational Institution Ciudadela del Sur (IESC)," in order to obtain a Master's degree in Social Sciences at University of Caldas.

** Higher Normalist, Master's degree in Social Sciences. Teacher of didactics of Social Sciences and investigative pedagogical Practice of the Normal Superior School of Quindío, Member of the Gippen group (Pedagogical practices research group of the Normal Superior School of Quindío).

Article Information

Received: October 16 , 2017 Revised: January 09, 2018 Accepted: June 30, 2018

How cite: Arias, I.C. (2018) School environments: a space for recognition and respect for diversity . Sophia, 14 (2), 84-93.





ISSN (electrónico): 2346-0806 ISSN (impreso): 1794-8932

Sophia-Education, volumen 14 issue 2. English version

Abstract

This article reflects an analysis of the importance of planned school environments, which allow the construction of relationships that strengthen school coexistence; the role of the teacher as a companion in the process of scientific learning, and the construction of citizenship. This was done with 33 eleventh grade students from a state institution, whose pedagogical model is an active urban school in the city of Armenia - Quindío; the objective was framed in proposing school environments of interaction and communication through the methodological strategy of participatory action research (IAP, for its initials in Spanish), which allowed to recognize diversity and improve coexistence among the students (who were) subject of (this) study. The study made it possible to identify what is reflected by the realities of students inside and outside the institution, as well as the challenges faced by teachers, in order to create favorable school environments in the construction of a school from and for otherness.

Keywords: School environments, learning, school coexistence, education.

Introduction

Education is at the service of life; an education is truer when it contributes the most to raising the level of quality of life.

John Dewey

The school is the center of convergence of diversity and difference; in the pedagogical spaces, all possible learning situations are triggered, and unending relations of reciprocity are recreated. After observing the behavior and interactions between teachers and students in different school contexts, it is notorious that in everyday school environments emerge conflicting situations due to identity constructions such as: gender, beliefs, abilities, customs (created or inherited), trends as changeable and liquid as Bauman calls them: "In this, we differentiate ourselves, the inhabitants of the modern liquid world. We seek, build and maintain the community references of our identities together; while, going back and forth, we struggle to adjust to equally mobile collectives, which rapidly evolve" (Bauman, 2005: 62).

A liquid world, characterized by a society that transforms its ethical bases in a vertiginous way, (one) that induces us to weave relationships lacking lasting cohesion; a disposable tendency that transcends cultural and ideological barriers, from which the school does not distance itself, since from its origins, it has been conceived as a privileged place to mold behaviors, inculcate values and transmit knowledge. Given this panorama, it is imperative to question today the role of the school as a social institution and that of the teacher as a guide in the pedagogical process.

The circumstances (above) described call for the transformation of the school's role in a society such as ours, which lives in contexts of neglect and disproportionate opportunities to improve the quality of life of the population with respect to its rulers; a network of society accustomed to assistance and the violation of their rights. These situations lead to moments of crisis faced without assertiveness, it is normal to observe in the communities the use of aggression and physical or verbal violence as the only alternative of solution to the divergences; we have naturalized violence, making it inherent to human action and consequently the family, as the primary nucleus of interaction; it allows its internal tissue to be dominated by the emotional mind that, according to Goleman, can trigger impulsive and probably illogical behaviors, which can make one lose control in moments of high emotionality, either because of feelings such as joy or disgust. Situations very close to the social context, therefore, to the school environment. (Goleman, 2012).

It is necessary, then, to rethink the school environment from the point of view of Chaux, a space of interaction that contributes to citizen education, (that) allows the transformation of relationships and participation in the community of teachers, students and institutions, making evident the role of the school as a small society, where are present many opportunities for learning and practicing civic life. (Chaux, 2004). As indicated by the law of school coexistence and construction of citizenship between the principles of comprehensive education, the participation of an active citizen who contributes to the construction of democracy and pluralism (Law 1620/2013).

After the (above) analysis, a deepening study was planned to strengthen the management of the classroom as a laboratory for learning and its school environments, through the methodological strategy of IAP, for the recognition of diversity and valuation of differences by means of reflection and action of the constructions of coexistence among eleventh grade students of a state institution of Armenia (Quindío province). The promotion of collective activities that made possible the interaction and reflective exercise on the own actions and overall, from the intervention of the school environment, in such a way that they allowed to observe transformations in the behavior, besides the evaluation of the own capacity, and of the others, in order to recognize the skills and differences in the construction of a healthy environment for coexistence.

The classroom as a learning laboratory

The ability to wonder is inherent to the human being; during the process of growth and maturation, the individual is questioned and walks through the search for answers to knowledge. Based on this premise, the basic competence standards developed by the MEN (Ministry of National Education, 2004)) propose an education of a scientific nature, mediated by processes of inquiry and research based on the real student context, using observation and registration as indispensable instruments of scientific knowledge. Tools that teachers must take into consideration when planning classroom pedagogical processes, as Dewey put it in his article 2 of *My pedagogical creed*, the school must represent life in a way so real and vital for the child that it allows to explore all the skills learned at home: intellectual initiative, independence of observation, judicious invention, forecast of results, and ability to adapt to them; characteristics that Dewey (1897) accused the school institution, and which are part today of a school as a laboratory for learning. A school based from the construction of meaningful knowledge, which are elaborated from conscious making, which carry out internalized processes and take shape from experimentation and contact with the environment, which foster positive school environments for the exchange of knowledge discovered by the protagonists of the educational act.

The school thought as a learning laboratory favors a warm classroom environment, allows the possibility of error as a starting point to a new process or procedure, and ensures that its students persevere in scientific knowledge, personal and social enrichment, by encouraging teamwork and helping the learner to persevere in the search of different alternatives to solve a real problem (MEN, 2004).

The work dynamics of the teacher in a learning laboratory induce the exchange of experiences both with students and the fabric of academic networks with other professionals of education for the strengthening of the processes of the school institution. It refers to a school that problematizes knowledge, which is constructed from the classroom or any institutional learning environment, and which focuses the students' concerns. In this way, concern is generated by the search for answers to the unknowns, or situations that problematize the context, which will result in attitudes of persistence, achievement orientation, consensus, self-criticism, freedom and the exploration of communication skills throughout the knowledge construction process, whose result will be what Ausubel (1976) calls significant learning as a product of non-instructional research, but accompanied by a teacher who has the described characteristics.

Similarly, meaningful learning is intimately related with the affective experience that, according to Novak (1988), is positive and intellectually constructive when the person who learns gets a benefit in understanding. Based on his theory, the predisposition to learn and build meaningful learning has a circular relationship: meaningful learning requires a willingness to learn and, at the same time, it generates a positive affective experience and presents a concretion between thought, feeling and action of the act of learning.

School environments and learning

The school, in its formative and educational role, is given the responsibility of being a social mobilizer, cultural transformer and generator of interest in knowledge. However, the realities faced by the Colombian educational system have exceeded the capacity of school efficiency. The rise of social networks and the mass media in the world have become the new educators; in other words, students are educated in the square, in the station, with video games, the internet and in favorite activities with their friends. All spaces become educational environments for apprentices.

Consistent with the above, the interdisciplinary educational environments are condensed as a proposal of interrelation between the physical space, human relations and the significance of culture, building a daily reflection that ensures diversity (Ospina, 1999), which calls for teachers and parents to weave closer relationships of interdependence for the formation of children and young people, with bi-directional lines of communication that transform rupture environments and norms that are sometimes democratic, in places of creation, participation and plurality.

The school institution reflects the characteristics of a social micro-system, because there is a structure of social and political hierarchy in which students are inserted, there is a system of justice and norms which, as in democratic countries, contain citizen rights and duties; the result of this context can favor or impede the responsible development of citizen competences in the social exercise.

This perspective calls on institutions to validate a school environment prepared to develop pedagogical proposals that allow students to contextualize their cognitive learning, with social responsibility and prosocial skills, in the development of environments of assertive reflection on the behaviors and decisions that affect the community to which they belong.

Therefore, it is necessary to revise the concept of environment, since initially it has an association corresponding to the biological level, a physical space where the interactions between biotic and abiotic beings create an environment conducive to development; according to Raichvarg (1994), the word "environment" dates from 1921 and was introduced by geographers, who considered that the word "medium" was insufficient to account for the action of human beings on their space; the environment is derived from the interaction of man with the natural environment that surrounds him.

When approaching this concept around a pedagogical look, one can think that the school environment refers to a process of interactions generated in an educational space that corresponds in this case to the school. By having as reference the ideal physical space for pedagogical actions, the

relationships within the classroom, between teacher and students, are mobilized to collectively build learning through the exploration of communicative and cognitive skills, mediated by actions based on the search for academic and emotional intelligence. As stated by Goleman, emotional intelligence (EI) is: "the ability that everyone has to motivate oneself and persist, despite the disappointments one may suffer" (Goleman, 2012: 96), as well as the ability to control impulses and delay gratifications, regulating humor, and preventing that certain inconveniences or disorders reduce the ability to think; in addition to the ability to develop empathy and hope in various situations.

Therefore, the skills that we deploy from the context of otherness should consolidate the development of citizen competencies for coexistence and the recognition of the other as an equal in the midst of diversity. Therefore, school environments of interaction and communication should allow the co-building of scientific and emotional knowledge through the design and application of activities that promote teamwork, joint decision-making, and the assessment of individual characteristics from the comparison that enriches and nourishes plurality in school life.

The factors that according to Goleman (2012) construct mental life thus come into play, referring to two different brain circuits, but interrelated, since the emotional mind is usually balanced with the rational, pointing out: "These two minds are exquisitely coordinated because the feelings are essential for thought" (Goleman, 2012: 44); however, sometimes the emotional mind, which is impulsive, overflows and kidnaps the rational mind; it would seem then that the more intense the feeling, the more dominant the emotional mind becomes, and more inefficient the rational one.

The previous premise questions the actions of the school and the teachers, (and) hints at the need to nurture education with the talents and abilities of the students. By enhancing their abilities, their emotional, social and cognitive development gets stimulated; in this way, the school could become the real scenario that educates for life. As Chaparro says:

[...] The educational environment is not limited to the material conditions necessary for the implementation of the curriculum, whatever its conception, or to the basic interpersonal relationships between teachers and students. On the contrary, it is established in the dynamics that constitute the educational processes and that involve actions and experiences for each one of the participants; attitudes, material and socio-affective conditions, multiple relationships with the environment, and the necessary infrastructure for the concretion of cultural purposes that are made explicit in all educational proposals (Chaparro, 1995: 2).

It is important to underline the need, not only for physical spaces of pleasantness and sensory connection for the pedagogical act, but also for the interconnection that arises in the relationships and communicative acts within that space, in order to obtain as a result an appropriate school environment for coexistence and construction of academic knowledge; besides the opportunity to develop metacognition skills based on active and dynamic processes from real experience, as evidenced by the trends of constructivism proposed by Piaget (1952) and explicitly used by the New School methodology. Elements currently accepted in academic and educational contexts.

School environments emphasize the need to be reviewed and analyzed by teachers as a way to self-evaluate pedagogical practices in an introspective way to mark the route or path in the construction of meaningful learning, as proposed by Novak (1988), since all education action in a learning environment generates an action that changes the meanings (thinking) and feelings of both students and teachers.

Consequently, Cano and Lledó (1995) think of the classroom as a meeting place where the school environment is built from the possibility of rapprochement among the members of the group, since the exchange will create cohesion relations with those who have common goals or objectives. In this way, we take a perspective of socialization, contact with the projections of other individuals, and the concretion of similar goals, which lead students to the analysis of other realities and contexts from a critical perspective, of personal and solidary growth.

Another aspect necessary in the generation of school environments for coexistence and learning is the disposition and contact with the materials for the work, the organization of the tables, and the spatial location of the classroom; (they) are relevant elements due to their integrative and common participatory nature in the methodological proposal of the new school pedagogical model, which tends to improve the efficiency and quality of education by promoting active learning processes, qualitative and permanent evaluation, as well as strengthening the school - community relationship.

School environments that generate learning facilitate two-way communication channels, where students are not the only recipients; teachers listen and take into consideration the suggestions of their students, while they listen to the notes and perceptions of the other members of the groups

The team work proposal enriches the classroom environment, mobilizes knowledge and facilitates the exchange, as well as the possibility of exploring various didactic strategies for the construction of knowledge. School learning environments transcend the physical space of the classroom, any scenario is conducive to inquiry, knowledge and socialization, while teachers have a clear intention of teaching and a specific objective in their pedagogical process.

Teacher-student relationships in the school environment

All human beings know and ignore something; hence, the growing concern to reveal what we do not know, the search for answers or explanations that allow us to understand the world. The school and its processes of socialization, adaptation to the environment and knowledge permeate the life of the person and try to glimpse the path towards the formation of individuals who use their perceptive abilities and cognitive abilities to transform their environment.

This reflection reminds the agents who participate in the educational act: the student as a center and constructor of learning, the teacher as a companion and guide of pedagogical, didactic and knowledge processes, and the context or school environment that makes possible the relations of complementarity between teachers and students; which turns teaching and learning into interactive actions that involve thought, feeling and action (Novak, 1988).

As mentioned, the school is a social institution that then has the responsibility of rethinking itself, in order to meet the demands of the new educational contexts; teachers become mediators of scientific knowledge and conciliatory agents of differences of criteria and thought. Leaders who facilitate communication and bidirectional exchange (student - student, teacher - student), the gestation of linear and constructive relationships in the midst of the cultural and technological richness that has invaded the spaces of socialization of the individual that constitute a diversified world. Therefore, it is necessary to understand:

> Every educational fact is a shared action (that is) destined to exchange meanings and feelings between the apprentice and the teacher. This exchange or negotiation is emotionally positive and intellectually constructive when apprentices increase their understanding of a segment of knowledge or experience; on the contrary, it is negative or destructive when understanding becomes obfuscated, or there arise feelings of ineptitude. (Novak, 1998: 34).

Novak's proposal uses a concept worthy of being highlighted, "exchange", power relations in the classroom are generally seen from the figure of authority of the teacher as the sole possessor of truth or knowledge, which creates a gap in the relationships of those who are present in the educational act. The teacher instructs, the students follow the instruction; however, it is imperative that the exchange be charged with positive emotions and non-aggression pacts, which allows constructive criticism and personal growth, the elaboration of a knowledge based on the confidence in the capacities and intellectual attributions of the other.

As Vygotsky's (1979) sociocultural theory supports [1], the effectiveness of learning varies according to culture. As the structure of the school encourages collaboration between children and teachers within the spaces of academic and recreational interaction; and these assume the role of active participants in the group learning experiences and not only the univocal direction of the same, it is sure that the benefits of cooperative learning will increase, the relationships within the classroom will be strengthened to create a bridge of knowledge with bifurcations that will allow us to delve into expectations, self-concept and the perception of the other; be it a partner or teacher, in the co - creation of knowledge and identity.

Relationship between learning environments and school coexistence

Conceived to coexist between the divergences and convergences of thought, there emerges the socializing process, in which it is incorporated, shared and constructed cultural meanings that constitute human groups with the "other" and the "others"; if a look is made to the institution of primary socialization, as it is "the family" that recreates signifiers of authority, norms, modes of relationships and responses to the environment that allow to be part of a community and interact in it to mold the culture, starting from the construction of a collective sense that it nourishes from the different individual manifestations, which means that cultural constructions are a framework of interpretations that allow the feeling of adhesion and belonging. (Martín Barbero, 2002).

Therefore, the processes of coexistence and affiliation to social groups are consolidated in the spaces or moments of interaction, whether physical or emotional: first, the family; then, the school is discovered; a scenario that highlights the existence of the other, which is different from me, that interprets and elaborates the world from different perspectives to those of the primary nucleus; this is how, in each socializing institution, relationships and antagonisms are built, which give a sense of belonging to an environment built by own and collective imaginaries.

Hence the need of training for the exercise of citizenship proposed by the MEN (2013), which includes a set of beliefs, knowledge, attitudes and skills necessary to ensure participation, peaceful coexistence and assessment of differences. In this way, this pedagogical process demands a review and analysis of the competencies needed to consolidate a democratic community, and to structure the educational processes with actions that allow active participation in the solution of everyday problems, the construction of standards and the peaceful resolution of conflicts.

The ministerial proposal is composed by three dimensions for the construction of a democratic society, which are presented in an articulated and not isolated way: 1). Coexistence and peace: coexisting peacefully and constructively with people who frequently have interests that conflict with ours; two). Participation and democratic responsibility: collectively build agreements and consensus on rules and decisions that govern all people, and that should promote the common good; and 3). Plurality, identity and assessment of differences: to build society from difference, that is, the fact that, despite sharing the same human nature, people are different in many ways. (MEN, 2013).

According to this perspective, the school institution must ensure the creation of environments conducive to coexistence, (ones) that take conflict or cultural differences as a positive basis for learning to be and for personal empowerment and, in turn, to achieve the consolidation of training processes for the exercise of human rights, the prevention and mitigation of school violence, (ones) that make them active citizens who contribute to the construction of democratic and participatory societies that lead to peace, not necessarily with the absence of conflict, since this is inherent to socialization, but one could think of what Galtung [2] (2003) calls a positive peace, which allows seeing conflict as an option for analyzing circumstances to transform and improve the environment with participative and pluralistic environments. Likewise, efforts must be made to carry out actions in the school that respond to these dimensions, which become challenges to strengthen spaces of coexistence, participation and diversity both in the school and the educational community.

It is necessary to appeal to the construction and strengthening of coexistence, reciprocity and recognition processes; to the extent that children and young people share with the educational community, feel part of it, identify with the constituent elements of it, and observe how their contribution makes it grow; their bond of adhesion is consolidated and recognizes the importance of the other in that construction of collective life. In this case, Hall (1996) makes it clear that identity or belonging does not guarantee uniqueness, since they are constructed from multiple discourses and readings of each context, which can provoke antagonistic subjectivities in such a way that identities mobilize the axes and situations of coexistence linked to the conflict generated by the acceptance of identities, in order to rebuild a society from the difference.

The proper recognition of emotions and feelings shape the individual's participation in the social groups to which they wish to adhere. The internal characteristics of persons are transformed in each interaction context, some prevail as they are the source of new knowledge and experiences; however, the creation of a sense of coexistence is inevitably based on the identity characteristics of the person. By recognizing who we are and what we want, we establish relations of approach with the other, sometimes from the difference; in others, they are strengthened in the uniqueness, always permeated by the essence of each being in its construction.

Therefore, education for the recognition of differences aims to make visible and recognize the other participants (who are) present in the educational act, because this implies the knowledge and recognition of all the experiential baggage of the people; that is, it requires the possibility that each (human) being encounters their own history of life and that of others. Only then, is it possible to interrelate experiences that contribute to a more inclusive, respectful and peaceful coexistence and autonomous development of the differences (that are) present in the subjects.

Likewise, school environments that converge in the socializing educational process (classrooms, recreational areas, school store, auditoriums and green zones, among others) represent places of interaction for students, elaborated by their imaginaries, which allows students to classify them as positive or negative; free or coercive; of construction or reduction of social or academic processes.

However, the school is directed to new routes of social and pedagogical thought; technological and scientific advances cause the construction of the social world to be transformed in an accelerated way. Referring to this phenomenon, Martín Barbero points out:

> This is the result of a society that transforms its ethical bases constantly. The speed of the technological world to obtain information, children and young people who grow up exposed and in most cases guided by social networks and the mass media that take a prominent place in culture and school. Society changes when the technological mediation of communication ceases to be only instrumental to become structural. Add to this that technology refers today, not to the novelty of some devices, but to new modes of perception and language, new sensibilities and writings, which transformed the forms of communication. (Martín Barbero, 2002: 31).

Conclusions

Each space occupied by human beings is impregnated with their essence, and school environments are not the exception, especially when so many people circulate through them with their experiences.

The physical space has aspects that characterize it and make it beautiful to the eyes; however, the experiences that are built in these spaces is what gives them true meaning for those who inhabit them; in this case, school environments to strengthen coexistence are characterized by the following aspects:

First, the physical space should be pleasant for the students, the impression given by the classroom is important from the first encounter, since a sensory connection is formed, which triggers a kind of attraction for the space that is occupied in that pedagogical moment of class, a clean space that speaks for itself and generates curiosity at the moment of entering in it. Added to this, the materials and elements used in the development of teaching strategies for class proposals have a high incidence in the perception of pleasantness and disposition for the work of the students.

Second, the disposition of the same, the organization of the classroom, should facilitate interaction. The location of the work tables by teams and the number of people who make it up will purify the interactions, since when working constantly with the same group in pairs or more, it will allow knowing the skills and faults of their colleagues for cooperative work, weaving clear affective bonds and recognition among them. Similar aspects in the application of the Escuela Nueva model, since the structuring of the pedagogical process focuses on the strengthening of certain attitudes and abilities in students by actively and reflexively approaching learning processes, which allows developing the ability to apply knowledge to new situations, to improve self-esteem and self-concept, and thus to strengthen the dynamics of identity construction; and relations of reciprocity in the search of the assertive coexistence, favoring the school environments of interaction and democratic participation that validates each one and the other: then, it is strengthened the acceptance of the diversity that composes the classroom.

Third, the relationship between those who inhabit the classroom at the time of class, the teacher-student

interaction is not recreated by hierarchies; rather, experience says that respect for the roles that each one plays in the educational act is necessary, mediated by relationships of closeness, dialogue and participation in the decisions of school life, which means the real and affective bonding of students in the construction of knowledge and proposals of what takes place within the classroom and the educational institution.

Fourth, playful and diversified didactic proposals must be inherent to the educational process. All human beings, even adults, enjoy playing and leisure, but contrary to this fact, it is a forgotten aspect in the last years of school life; teachers believe that students of higher grades should take care of learning the formula or the concept of memory; therefore, it is not time to play in the classroom, they limit the teaching to master classes that show a wide wealth of knowledge, and at the same time reflect the need to implement didactic strategies that mobilize the classroom and that explore the artistic, cognitive and creative abilities of the subjects.

Teachers are responsible for giving life, (they are) responsible for the effectiveness of teaching according to the context, although some aspects of the system cannot be solved, such as the shortage of material, the individual needs of students or of the institution itself; it is possible to facilitate educational contexts that generate tools, in order to transform at least the school life and the classroom; this requires vocation teachers, committed to the decision of life, at being transformers of the context.

The promotion of pedagogical activities to favor the school environment becomes a pedagogical and didactic challenge, inducing the connection between students and teacher, in order to listen to their proposals and rethink the didactic strategies that are used when directing teaching and learning processes.

To close, it should be noted that teachers, despite multiple daily occupations and responsibilities, can transform school environments to improve academic and coexistence levels, but this will depend to a large extent on personal commitment and interdisciplinary work. The alliances among teachers from different areas of knowledge working in such a way that they converge in the same task that strives for the improvement of the cognitive and social processes of children and young people can result in really significant learning in the formation of persons (who be) critical of their context.

References

- Ausubel, D. (1976). Psicología educativa: un punto de vista cognoscitivo. Mexico : Trillas .
- Bauman, Z. (2005). Identidad. Buenos Aires: Losada.
- Cano, M. I., & Lledo, Á. (1995). Espacio, cominicación y aprendizaje. Sevilla: Diada Editorial S.L.
- Chaparro, C. (1995). El ambiente educativo: condiciones para una práctica educativa innovadora. Tunja. : CINDE-UPTC.
- Chaux, E. (2003). Agresión reactiva instrumental y el ciclo de la violencia . Revista de estudios sociales, 47 58.
- Chaux, E. (2004). Competencias ciudadanas. De los estándares al aula. Bogotá : Uniandes .
- Dewey, J. (1894). Carta de Jhon Dewey a Alice Dewey . Illinoins: Morris Library.
- El Congreso de Colombia.(2013). Ley 1620 de 2013. Por la cual se crea el sistema nacional de convivencia escolar y formación para el ejercicio de los derechos humanos, la educación para la sexualidad y la prevención y mitigación de la violencia escolar. Bogotá: El Congreso.
- Galtung, J. (2003). Paz por medios pacíficos. Paz y conflicto, desarrollo y civilización. Bakeaz. Centro Documentación Estudios para la Paz.
- Goleman, D. (2012). Inteligencia emocional. España: Kairos.
- Gómez, F. (2016). Constitución Política de Colombia Anotada (34 ed.). Bogotá: Leyer.
- Hall, S y du Gay, P. (1996). Cuestiones de identidad .Buenos Aires, Madrid: Amorrourtu.
- Martín Barbero, J. (febrero de 2002). Jóvenes: comunicación e identidad. Pensar Iberoamérica(0).

- MEN. (2004). Formar en ciencias !El desafio; lo que necesitamos saber y saber hacer . Bogotá: Ministerio de Educación Nacional.
- MEN. (2013). Guía 49. Guías pedagógicas para la convivencia escolar. Bogotá: Ministerio de Educación Nacional.
- Novak, J. (1988). Aprendiendo a aprender . Barcelona : Martínez Roca.
- Ospina, H. (1999). Educar, el desafío de hoy: construyendo posibilidades y alternativas. Santafé de Bogotá: Cooperativa Editorial Magisterio.
- Piaget, J. (1952). The origins of intelligence in children.New York: International Universities Press.
- Raichvarg, D. (1994). La educación relativa al ambiente: Algunas dificultades para la puesta en marcha. Memorias Seminario Internacional. La Dimensión Ambiental y la Escuela, 2-28.
- Vygotski, L. (1979). El desarrollo de los procesos sicológicos superiores . Buenos aires : Grijalbo.

Footnotes

[1] Vygotsky's Sociocultural Theory (1979) places emphasis on the proactive participation of minors (not legally adults) with the environment that surrounds them, being the cognitive development the result of a collaborative process. The author argued that children develop their learning through social interaction: they acquire new and better cognitive abilities as a logical process of immersing themselves in a way of life. Those activities that are carried out in a shared way allow children to internalize the thought and behavioral structures of the society that surrounds them, appropriating them.

[2] In his theory of conflict, (Galtung, 2003) states that not only must be recognized if the conflicts are good or bad; rather, to offer mechanisms to understand them logically, scientific criteria to analyze them, as well as methodological ones (creativity, empathy and non-violence) to transform them.