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STUDENT LEARNING, CHILDHOOD & VOICES | RESEARCH ARTICLE

Peacebuilding education, a complex perspective

Isabel Cristina Rivera-Lozada^{1*}, Raúl Collazos-Ardila² and Oriana Rivera-Lozada³

Abstract: This article presents the design of a formal, special and flexible educational model for basic secondary school, aimed at adult victims of the armed conflict and former combatants in Colombia. This model is supported by emergent pedagogies and participatory methodologies which seek to consolidate harmonious relations between communities and nature with a higher purpose: a peaceful coexistence as a support for peace construction in Colombia. It is based on the pivotal element Culture of Peace that contributes to the construction of sustainable peace within the framework of social justice and rights. The pedagogical pillars have three complementary approaches: bio-learning, pedagogical mediation and popular education. The methodology fits into complex thinking that consists in the recognition of networks of relationships existing in knowledge, as well as the impossibility of exhausting it in a single epistemic field, in order to build and share knowledge through an integrative project that engages different academic fields incorporated in the study cycles. Thus, it would be possible to address the pivotal elements, with a multidimensional, contextual and trans-disciplinary perspective in interaction with the areas of knowledge required for these learning cycles.

Subjects: Adult Education and Lifelong Learning; Multicultural Education; Secondary Education; Classroom Practice; Curriculum Studies; Educational Psychology

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The authors are recognized researchers within their countries. The research experience includes participation in consultancies on innovative educational models. Facilitators for the construction of innovative methodologies, and development of qualitative, participatory and systematization research processes, for the strengthening of Educational Institutions, Social and Community Organizations, as well as participatory systematization processes. They have investigative experience in gender, education, conflict, and health education.

This paper is the result of work with a social organization from Cauca, Colombia that sought to design an educational proposal that prepares the Colombian population to build a peace committed to the social problems that cause internal conflict and allow both victims as demobilized people live peacefully in Colombian territory.

PUBLIC INTEREST STATEMENT

This article presents the design of a formal, special and flexible educational model for basic secondary school, aimed at adult victims of the armed conflict and former combatants in Colombia. This model is supported by emergent pedagogies and participatory methodologies which seek to consolidate harmonious relations between communities and nature with a higher purpose: a peaceful coexistence as a support for peace construction in Colombia.

It is based on the pivotal element Culture of Peace that contributes to the construction of sustainable peace within the framework of social justice and rights. The pedagogical pillars have three complementary approaches: bio-learning, pedagogical mediation and popular education. The methodology fits into complex thinking that consists in the recognition of networks of relationships existing in knowledge, as well as the impossibility of exhausting it in a single epistemic field, in order to build and share knowledge through an integrative project that engages different academic fields incorporated in the study cycles.

| **Keywords:** Education; rights; territory; bio-learning; complexity

1. Introduction

The signing of the Peace Agreement in Colombia was a challenge for Colombian society and after fifty years of armed conflict there was an urgent need to rebuild the social fabric and propose innovative educational models that include the population that was once a victim of violence and conflict, as well as former combatants, in search of a stable and lasting culture of peace. In this scenario, this complex educational model arises and recognizes the need to articulate approaches of emerging critical pedagogy with complex holistic methodologies to develop formal education cycles focused on the conservation of life in its broadest sense.

Although the culture of peace has originated a great number of research in the educational field (Arteaga, Luna, Cecilia & Chala, 2017), focused on the challenges for the educational system, very few have managed to consolidate educational models that have been put into practice. The most recognized Colombian model for rural population is called The New School or *Escuela Nueva* (Martínez et al., 2016). Despite its positive impact (Forero et al., 2006), the model does not take a culture of peace nor education for the vindication and defense of rights into consideration as its pivotal elements as proposed by the Education and Complexity model. This document shows the complexity applied on the design of an educational model where emerging pedagogical approaches converge with a complex framework that makes use of uncertainty, holism and relationality to find a way to transform the Colombian conflict scenarios into territories of life and social justice.

2. Educational approach

The pedagogical pillars of the educational model are based on three approaches as they are considered complementary: bio-learning, pedagogical mediation and popular education.

2.1. Bio-learning

Bio-learning is rooted in the conception of life as a supreme value and as a purpose itself: *life has no other meaning than being lived* (Maturana & Varela, 1996); hence, it is valuable as it is. Thus, each living being has the capacity to self-produce, create and repair its own elements, self-poiesis, and self-organize; therefore, from the perspective of bio-learning, *to know is to live and to live is to know* (Maturana & Varela, 2004).

It involves the essential characteristic of all living things to learn. It recognizes that life is a self-organizing system that learns permanently. Thus, it follows that all living beings are producers of knowledge for survival and interaction with others. Concerning these ideas, the whole body learns, not only the brain. For this reason, knowledge does not only have an intellectual nature and learning does not occur in the same way for everyone. Therefore, bio-learning accounts for learning as an emotion, as a necessary enjoyment of life. It considers knowledge a way of living and hence the multidimensional nature of learning: it is acquired when living.

Through this approach, the educational proposal incorporates the respect for others as a first element that is not only for human beings, but also includes nature, taking life in all its breadth as the center and aim of existence. Respect is a natural condition of living beings: to see themselves in others because, in them, it is possible to recognize other living beings. It is respect that does not legitimize others since it recognizes that the other is already legitimate.

A second element is love as a human emotion, that biological *stickiness* that constitutes and is necessary to recover in the learning processes because it is part of the human essence and there is a great lack of it in the contemporary coexistence. Learning in love makes it possible for relations with others to emerge legitimately and to coexist under any circumstances (Maturana & Nisis, 2002).

The third element is conversation. In bio-learning, conversation is not about communicating or informing. It is to intertwine, to increase one's biological stickiness; to converse is to love. In conversation, we interweave with others and it is done through emotion. In conversation we build relationships of trust and the fabric of life that grows in the interaction.

These three elements (respect, love and conversation) are the basis for the educational processes that will move and rescue the learning of learners and mediators, to interweave and amalgamate knowledge that will allow the flow of the educational training cycles.

2.2. Pedagogical mediation

This pedagogical approach explains human beings who relate to each other in the act of teaching and learning, so this approach is then perceived as a relational act, which conceives subjects of learning as active interlocutors in the construction of the educational meaning, and implies the contents treatment and forms of expression of the different subjects, within the horizon of an education conceived as participation, creativity, expressiveness and relationality (Gutiérrez & Prieto, 1999).

Although mediation depends on teachers' capacity and passion, the proposed educational design recognizes the desire and commitment to link teachers (mediators) who share the educational proposal as an inter-relational experience of lifelong learning.

Pedagogical mediation involves four moments:

- (1) Design: discussion, sharing and consensus on the reference framework for the design of learning cycles.
- (2) Learning cycles that are composed of contents integrated into the bio-learning proposal.
- (3) The reference framework so that with the help of those who will mediate the learning proposal, can co-inspire in the development of the proposed educational design.
- (4) The development of the educational proposal expressed in a scenario where knowledge converges and the educational act becomes concrete.

This mediation approach promotes critical attitudes that capture the learners' experiences and contexts. It promotes learning processes rather than teaching moments; it is based on playfulness by claiming learning as inherent to the condition of the living being; it rescues the enjoyment of learning that life has in its capacity to coordinate actions and interact with other living beings, it risks itself by *feeling the alternative* in education (Gutiérrez & Prieto, 1999). It outlines coexistence, interpersonal relations, participation, and affection at the center of the special cycles, under the consideration that alternative learning recognizes its

sphere of action within the framework of *uncertainty*; for this reason it does not promote certainty of answers inasmuch as it fosters the questions emergence (Freire & Faundez, 2014). It encourages the educational action to solve problems and to demystify and resignify the *magical* answers of certainty.

Pedagogical mediation has an inclination to the appropriation of recent Colombian history, linking the conflicts not yet narrated in the official texts and collecting the voices of those forgotten in history written by the victors' voice, as a way of disrupting the passive virtues with which learning emerges from obedience and submission to turn them into active virtues of history-makers committed to the future of the country.

2.3. Popular education

The Brazilian pedagogue Paulo Freire stated that humanization is the horizon of every educational action, *the dream of humanization, whose concreteness is always a process, always becoming, and which passes through the breaking of the real, concrete, economic, political, social, ideological, etc., ties that are condemning us to dehumanization* (Freire, 1992).

One of the great educational challenges in Colombia is to promote processes that contribute to the construction and reconstruction of the social fabric of the community, as well as the creation and implementation of strategies aimed at strengthening the culture of peace. It promotes spaces for dealing with conflicts where respect for life and the ability to overcome contradictions without disappearing others prevails.

Popular education nourishes the pedagogical approach with three principles (the critical and creative reading of the context, dialogue and hope) that unfold the potential of what is human in concrete spaces where life in its multiple manifestations is expressed.

2.3.1. *Critical and creative reading of the context*

It presupposes an amazement attitude; it questions what is established and the certainties that make us see the acts of injustice inequality and social inequity as natural. The critical eye on reality puts us between the certainties and uncertainty so that questions on the transformation and recreation of realities emerge, as Freire (1997) proposed when recognizing *uncertainty as the only place where it is possible to review again necessary provisional certainties*, to reveal how far we have come

in the middle of the uncertainties, to reinvent our own progress as an alternative and commitment to transformation.

2.3.2. *Dialog*

As a possibility of meeting for construction in the midst of diversity and difference, it is the scenario that facilitates the recognition of oneself and others. In the dialog, other possible worlds are designed, *it is the niche of formative interaction in which meaning is granted and the meanings of practices, desires, aspirations, dreams, hopes and history are discovered, when making possible the exchange of discourses and critical conversations loaded with reality and possibility* (Ghiso, 2013).

In the dialog practice, simplicity, kindness, humility, the ability to listen and the willingness to learn, transform and be transformed are proposed. A dialog that does not avoid conflict recognizes the opportunity to overcome problems and find alternatives in cultural diversity (Collazos & Alarcón, 2016).

2.3.3. *Hope as a mobilizing spark that permits us to imagine other possible scenarios*

There can be no search without hope. To lose hope is to lose the possibility of constituting ourselves as subjects, of transforming the world and hence of knowing it. We must put the right to dream that *another world is possible* before claiming that *there is nothing to do*, as expressed in the slogan of the World Social Forum (Torres, 2007). That is why education helps to build dreams, reinvent utopias and sow hope for change.

The scenarios where situations of pain, war and uncertainty converge, as well as alternatives to conflicts, require pedagogical proposals where the words circulate to find ways of personal and collective restoration; scenarios where the meaning of life is restored or better, pedagogical commitments to re-signify life. Knowledge is built and enriched from the capacity to reason, but also to feel, communicate and celebrate new discoveries and transformations.

3. Methodological approach

The methodological approach to the design of a peacebuilding educational proposal signified a reflection on the perspective of complex thinking. Particularly, it takes the understanding of *complexus*, what is woven together, from the African thinking present in the people from the southwest of Colombia, *Ubuntu, I am because we are*; and invites us to

conceive the world as a whole interwoven place, as a fabric composed of fine threads, as proposed also by the Nasa people (native people of southern Colombia) in the “fabric of education”. The educational proposals that integrate knowledge seek a method that has the goodness

and capacity to combine the knowledge of the sciences with all those coming from humanism and the areas of politics, philosophy and social sciences, as proposed by Edgar Morín (2004).

Although Nobel Prize in Chemistry, Ilya Prigogine, (Prigogine & Stengers, 1997), who raised the need to understand instability as a property of nature and proposed the need to reconstruct our relations with it, the case of deep ecology (Naess, 1989), with the explanatory capacity of the world as a system that manifests complex properties, we will focus on restricted complexity (Morín, 2007). This type of complexity is limited to systems that are considered to be complex, in other words, to those whose dynamics have a large number of interactions and retroactions, as well as a multiplicity of interrelated, interdependent and retroactively associated processes. By means of restricted complexity we seek to explain the complex dynamics present in the territories inhabited by indigenous peoples, afro- descendants and peasants and how their cosmovisions dialog in the spirituality—community- nature trilogy.

The proposed educational design methodology in this research is based on the challenge of complexity by recognizing the networks of existing relations in knowledge, as well as the impossibility of exhausting this knowledge from a single epistemic field. Thus, it allows us to create the real possibility that we construct and share knowledge, in an integrating project that dialogs with the different fields of knowledge which are inherent to the study cycles and enables the approach of the integrating pivotal elements with a multidimensional, contextual and transdisciplinary perspective in interaction with the areas of knowledge required for these learning cycles.

As Morín (2004) stated, *when we talk about complexity, we must face the difficulty of thinking and living*, and for this methodology to contribute to unravel the complexities, this research uses three methodological elements that accompany this journey: *inter-relationality, uncertainty and holism*.

The first element is *inter- relationility*, which is inherent to life and in the understanding that knowledge is not compartmentalized, as the disciplines and areas of knowledge propose. The life we live is composed of a circuit of interdependent and retroactive relations (Morín, 1993) that coexist, sometimes complementing and sometimes antagonizing each other. The inter-relationality involve the connections that mechanistic determinism has denied us for so long, *education taught us to separate rather than unite* (Morín, 2007). Thus, the methodology incorporates the integrative pillars in the educational design as a cohesive pretext, so that the knowledge areas proposed in the Article 23 of Law 115 of 1994 of the Republic of Colombia can be developed in an autonomous and dialogical way among learners and mediators and the territory in which they live.

Uncertainty is the second methodological element of complex thinking. The recognition of knowledge in a dynamic of permanent but unfinished and indeterminate questioning introduces the amplitude and flexibility to recognize ancestral, local and our own knowledge in constant dialog with the knowledge of the sciences in this methodological proposal. It is uncertainty that incites and provokes the curious question in the classroom, and thus contributes to learning enjoyment and strengthens the research processes inherent in education.

The third methodological element of complex thinking, *holism*, is based on the holographic principle according to which *not only a part is within a whole, but also the whole is within a part*; and in opposition to reductionism, *complexity asks for an attempt to understand the relationships between the whole and the parts* (Wilber et al., 1997). Thus, from a holistic perspective, the above methodology claims that knowledge should not be fragmented, studying it in parts is not enough, just as knowledge of the whole is not enough if the parts are ignored.

The existing inter-relations between pedagogical approach and methodology allow us to establish some of the emerging elements, typical of this educational model, that give it its authentic, innovative and alternative character.

	Methodology Pedagogical approach	Complex thinking		
		Uncertainty	Holism	Inter- relationality
Pedagogical mediation	Hope as a social mobilizer/love and social Coexistence	Stopping determinism	Community life project	Spirituality/ community/nature
Popular education	Respect/ critical reading of contexts	The question Openness of mind	Empathy	Complementarity
Bio-learning	Dialog of knowledge/ conversation	Cultural negotiation	Diversity	Harmony

Source: Own elaboration

The three methodological elements converge in the relational matrix (illustration 1) which offers an understanding of the relationship between the used methodology, complex thinking and pedagogical approaches that served as references: bio-learning, Popular Education and Pedagogical Mediation. Illustration 1 shows a possible route that leads to peace or *ajayu* as a superior dimension in the construction of coexistence. *Ajayu is understood in the Andean world as the force that contains feelings and reason, it is also understood as the center of a living being that feels and thinks; it is the cosmic energy that generates and gives movement to life. The consolidation of this energy coming from the human being or jaqi-warmi (man-woman) depends fundamentally on the peace that is achieved with the universe, respecting all the other beings and life that surrounds us (Villareal, 2011).*

Empathy is usually understood by putting yourself in other’s shoes, that is, feeling the stones or calluses that carve up the others. This popular saying teaches us to feel what the other feels

and establishes a relationship of understanding and acceptance. Complementarity is also fundamental in the construction of harmony, *being complementary means shedding the barriers of selfishness, to accept others by recognizing we may be different . . . , it means having the capacity to accept that others have knowledge and practices, which I can even incorporate into my own (Collazos & Alarcón, 2015).* The search for complementarity goes beyond human beings; it is necessary to establish the principle of *good living* with nature, since we are part of it.

Diversity, understood also in the spirituality—community—nature interrelationality, is a challenge, for the Colombian society, for the transformation of the multiple conflicts and to include them in the reconstruction of the social fabric. A fundamental support for coexistence is respect for diversity, which includes the free thinking option, sexual orientation, among others. But this respect transcends the subjectivity in people’s culture and, of course, nature, which nourishes culture. The legends and myths about goblins, mother mounts and weeping women have their origin in the relationship between community and nature, in a positive spiritual force to defend nature from human predation.

4. Model characteristics

The educational model has five characteristics that strengthen it in the field of adult education for coexistence and peace construction in Colombia:

- *Innovative character.* The dialog of three emerging pedagogical approaches: bio- learning, popular education and pedagogical mediation, put life in a higher dimension. It investigates through contexts and sees the teacher as a learning mediator. In this mediation, the methodological route is defined as the complex thinking and, from it, another triad emerges:

uncertainty, holism and inter- relationality; this framework facilitates the emergence of another dimension that contributes to the prioritization of life: *harmony*.

- *Transformative character*. Emerging and critical pedagogies promote transformations of subjects and realities; qualitative research starts from a question about the context, problematizes it, designs research instruments, analyzes and interprets it and finally proposes alternatives and actions for transformation. The different actors (learners, mediators and communities) are the ones who will

transform their realities by modifying and enriching their discourses and practices, which will support the culture of peace.

- *Sustainable character*. Social sustainability in time and territory is a consequence of

the transforming evidence of subjects and realities, product of the participatory and inclusive practices that circulate in the methodology, development of curricular contents and collaborative evaluation of different social actors in the educational process.

- *Multiplier character*. This is ensured by the systematization of the educational model and the processes of scaling up to other communities and regions of the country.
- *Ethical-political character*. Political because it addresses the active and real learners' participation in the observation and investigation of the territory, the knowledge and defense of rights, as well as the strengthening of coexistence in the community. And ethical, supported by universal values in dialogue with local values, the understanding and resolution of good-bad and good-good ethical dilemmas.

4.1. Pivotal elements, dimensions and components

Education and complexity: the pursuit of the construction of peace in Colombia is based on the pivotal element Culture of Peace, which materializes the communities' desire to make inclusive education a real alternative for the transformation of the conflicts that have characterized the Colombian society in the last fifty years. In order to contribute to the construction of sustainable peace within the framework of social justice and rights, this articulating axis uses three components: territory, rights and coexistence. These components advance *pari passu* with four dimensions that include a particular dimension in each cycle, focusing the attention on knowledge construction and learning in a specific area. These dimensions begin with the individual and its relationships with the family and nature; at the next level they advance to community relationships of a regional local order. Later, the relationships open up to the global order and finally, the global relationships dialog with the local order.

Addressing the cycles, via dimensions, enhances the possibility of scaling the thematic knowledge using the components of the Culture of Peace axis, territory, rights and coexistence. *Education and complexity* addresses the first cycle with the *Individual-Family-*

Nature dimension and proposes the integrative pedagogical projects, as well as the interrelation of the areas of knowledge with the corresponding educational standards.

The proposed model is analogous to the Special Integrated term 3 proposed by the Ministry of National Education, which corresponds to grades 6 and 7 of basic education.

This dimension enables the dialogue of knowledge to flow, beginning with the individual, the first independent organism, towards the family, the primary unit of social interaction, and from there, to the interrelations with other beings that make up nature.

The Local Community-Nature dimension addresses the Special Integrated Term 4, which corresponds to grades 8 and 9 of basic education. This dimension articulates the knowledge and learning resulting from the individual and family environment in order to integrate them with the socio-cultural processes present in the communities; they dialogue with nature in a perspective that goes beyond the family environment in order to incorporate the societal relations characteristic of life in the community.

For the 10th grade, the dimension addressed is global community nature; it proposes a dialogue between different aspects of the globalized world and the impact on nature, with the integrative project and the different activities that take the contents interrelated with the local contexts into account.

Glocal nature community, is the dimension corresponding to grade 11, the famous phrase by René Dubos, “*think global, act local*”, is an invitation to holism as a perspective of analysis and complex learning in dialogue with emancipatory pedagogies that form people with the ability to make critical readings of their local realities in relation to what happens in the globalized world, acting to contribute to the construction of a better world based on local practices.

5. Results

The research achieved the design of a concerted educational model based on permanent dialogs with social organizations, indigenous cabildos, African community councils, peasant reserve zones, educational institutions, universities and teacher training colleges that provided feedback to the model. In addition, the resulting education model enhanced the intercultural learning of learners belonging to indigenous, African and peasant communities.

The educational model proposes integrative and contextualized activities, plots and projects according to the interests of the learners in each one of the four territories where the model was applied. The educational communities accepted and socially included former combatants, promoting the educational proposal and recognizing it as a space for agreement and dialogue for peaceful coexistence in the territories. Learners and communities where the experience of this model was applied gained a feeling of cohesion and belonging for the defense of their territories.

This educational proposal has achieved recognition at a national level. In the territory where it was initially implemented, more than 80 mediators were trained, 40 of them were selected to replicate the experience. The first phase trained 702 learners in territories that were affected by the conflict, 60% are women, 6% are former combatants, 79% are indigenous, 10% are African, 11% are peasants, and the educational model is present in four municipalities.

It is possible to consider regional contexts additional to those initially proposed for this research that incorporate diverse armed actors, as well as to introduce results of the regional chapters of the processes of memory recovery and the Truth Commission, in such a way that the educational model contributes to the healing of the Colombian social fabric.

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