



Dreams and fears in the process of creative thinking in children from areas affected by the armed conflict in Colombia

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ARTICLE INFO

Keywords:

Education
Armed conflict
Creativity
Narrative analysis
Children

ABSTRACT

The development of creativity and creative thinking in early school-age children is a strategy to foster future capabilities for innovation and change. It is also a strategy to instill resilience in these children, enabling them to face the challenges posed by the various environments that surround teaching and learning processes. This article analyzes the dreams and fears expressed by children from educational institutions located in municipalities affected by the armed conflict in Colombia, within the framework of a route designed to develop creativity and innovative thinking. A qualitative narrative analysis methodology was used to characterize and analyze the narratives of 68 co-creativity teams, involving 408 children. The results show that the narratives are influenced not only by the context in which the children live but also by the consequences of the armed conflict in the areas where the schools are located. The findings suggest that educational strategies like the one studied must incorporate elements that allow for adaptation to the context from the design stage, with a differential approach, to generate the expected positive effects in the territories where they are implemented.

1. Introduction

In Colombia, the impact of the armed conflict has caused physical, cognitive, and emotional effects on children, as a result of their exposure to a prolonged period of violence in the country (Alvarán, Carrero, Castellanos & Pinilla, 2019; Salazar, Martínez & Bermúdez, 2017). Various studies addressing the effects of conflict in other countries have focused on the importance of including children in dialog communities as part of their education with a social perspective. This approach aims to strengthen their resilience and provide them with the necessary competencies and skills to face risks and situations of marginalization caused by the conflict (Alvarán et al., 2019; Bosqui & Marshoud, 2018; Watson, 2015; Wessells, 2016).

The Zones Most Affected by the Conflict (ZOMAC) in Colombia are defined as geographic areas that have experienced high rates of violence and displacement due to the armed conflict. The reconstruction of educational systems in these areas has been an integral process encompassing various aspects. Projects have been implemented to rehabilitate and build infrastructure for children, ensuring safe and

conducive learning environments. Additionally, initiatives have been developed to ensure access to education, including the creation of new schools and strategies to overcome logistical barriers. Psychosocial support programs in schools aim to help students process trauma and develop emotional and social skills. Specialized teacher training has also been critical in addressing the specific needs of conflict-affected students. In Colombia, pedagogical strategies have been adapted to the needs of the context (Meisel, Bermeo-Andrade & Garzón, 2011). The promotion of socially oriented education, focused on values of tolerance, peace-building, and the active participation of the community in educational planning, has been essential to rebuilding not only access to information but also the social fabric in these affected areas.

Children's competencies in ZOMAC areas can be affected in multiple dimensions. At the cognitive level, constant exposure to traumatic situations can affect their concentration, memory, and learning capacity (Papalia, 2017). On an emotional level, anxiety, depression, and stress may hinder the development of fundamental socio-emotional skills, such as empathy and emotional management. Socially, the disruption of community life and family dynamics can limit opportunities to develop

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communication and teamwork skills. The capacity for resilience is particularly affected, as children in these areas face difficult circumstances that demand an exceptional ability to adapt and recover. These competencies directly impact creative thinking, as an adverse environment can hinder children's ability to imagine, create, and find innovative solutions (Masten & Coatsworth, 1998). However, developing resilience and overcoming challenges can also enhance creative thinking, allowing children to find original and efficacious ways to cope with adversity and contribute positively to their environment (Masoleh & Shafiabady, 2022). Effective reconstruction in ZOMAC areas must not only address immediate needs but also actively work to strengthen these essential competencies, providing children with the necessary tools and skills to cope with and transform their reality.

In the search for strategies to promote creative thinking in contexts affected by the armed conflict in Colombia, one notable initiative is *the Route of Creativity* (Duque, Duque Aristizábal, Henao & Velásquez, 2021). This methodological mechanism, developed by the *Creaciencia Project* in the department of Tolima, Colombia, aims to generate social appropriation of scientific, technological, and innovative knowledge, focusing on critical and creative thinking in children. *The Route of Creativity* [Ruta de la Creatividad] methodology focuses on strengthening children's cognitive, metacognitive, affective, and motivational competencies to increase their interest and skills in research.

The Route was implemented through the creation of co-creativity teams, made up of six students, a teacher from the educational institution, and a social leader. These teams are configured as spaces for cooperation and knowledge management that involve the entire educational community, promoting an active role for the students. Teachers play a key role in creating environments conducive to critical thinking, guided by fundamental values. The scaffolding learning strategy emerges as a key approach to guide students in developing critical thinking and scientific competencies, fostering the free expression of emotions and autonomy in thinking about diverse problems with other children (Crujeiras & Jiménez, 2018; López-Aymes, 2013).

The Route of Creativity is structured in four interrelated phases. In Phase 1, an assessment of the territory is conducted to identify problems and select a relevant one. In Phase 2, the problem is identified by analyzing its causes, consequences, and the actors involved. In Phase 3, alternative solutions are generated and analyzed, selecting the most appropriate one. In Phase 4, a representative prototype of the solution is designed and constructed. These cyclically conceived moments provide feedback to advance along *the Route*, allowing for reflection, complementation, and continuous improvement.

During the first phase of *the Route of Creativity*, the identification of the problem focuses on the recognition of the territory, which is a crucial step to understand the interaction between people and their environment. This process involves understanding the inhabited context, identifying strengths, weaknesses, and challenges. The assessment of the territory is carried out with various social actors using tools such as social mapping, traffic light mapping, and the tree of dreams, fears, and commitments. This last tool makes it possible to explore various aspects of the territories according to the perspective of the co-creativity teams and other key actors of the community, based on visualizing different perspectives in different parts of the tree: the roots represent the fears, the stems reflect the commitments, and the foliage symbolizes the dreams.

This study presents the analysis of the findings from the first phase of *the Route of Creativity* carried out in the Department of Tolima, a central region of Colombia that has been particularly affected by the armed conflict. The dreams and fears narratives expressed by children are addressed and compared according to the location and typology of the conflict affecting the area where the teaching-learning process motivated by *the Route* takes place. The results of the comparative and critical analysis of these narratives suggest that pedagogical strategies, such as the one studied here, need to be shaped right from the design stage, considering the pedagogical implications it will have for educators, and

the characteristics and experiences of the students who are involved in a process aimed at generating creative thinking. At the same time, the study suggests the implementation of a strategy with a differential focus on the particularities of the territory where it will take place, so that it contributes more effectively to creating a workforce that can be an agent of change in the territories and contribute to long-term sustainable technological, economic, and social development.

The comparative analysis of the narratives of 68 creativity teams involving 408 children is presented in this article under five sections. The first section is devoted to exposing the issues and describing the particularities of the project as a case study within the Colombian context. The second section presents the theoretical foundation that supports the analysis, in addition to previous studies that serve as background for its approach. The third section details the methodological aspects including the participants' profile, the instrument used for the collection of information, and the procedure that involved the use of qualitative methodology for analyzing dreams and fears. The fourth section describes and analyzes the children's narratives according to the location of the school as well as the level of impact of the armed conflict in the areas of the Tolima department, Colombia where *the Route of Creativity* was implemented. This section further discusses the implications of the results in relation to other studies that address similar problems and report findings in other contexts around the world, with particular emphasis on the children's narratives and their experiences with internal armed conflicts. Finally, the fifth section reports the conclusions of the study, along with possibilities for future research.

2. Theoretical references

An early step in developing creative thinking in children is to encourage them to recognize their dreams and fears. This process itself serves as a source of ideas and motivation for new challenges. Children can channel their fears into creative solutions, transforming their concerns into opportunities for learning and growth. Similarly, dreams serve as motivators for generating ideas, providing the drive and purpose to achieve goals. Resilience plays a key role in helping children overcome obstacles that might limit the realization of their dreams, turning these challenges into opportunities to develop creativity and innovation (Ahn & Filipenko, 2007).

In this study, creativity is understood as the result of interrelationships among personal attributes, cognitive abilities, and environmental influences (Amabile, 1983). It is a complex process involving genetics, intelligence, socio-cultural environment, motivation, perception, imagination, learning style, and attitude, among other factors. Together, these elements enable the development of a novel and original product (Menchén, 2009). Creative thinking is thus the mental process that leads to creative and novel responses to problematic situations.

It is possible to infer that the dreams and fears a child expresses may be closely linked to their immediate, close, and distant environments. The immediate environment refers to personal experiences, individual challenges, and daily interactions. Personal experiences, play activities, personal challenges and accomplishments, as well as interactions with friends and peers, influence a child's capacity to conceive, experience, and think creatively (Ayudhia, Wardhani, Sholikhah & Pramono, 2023; Cheng et al., 2023; Liu, Yu, Zhao, Liu & Jiao, 2023). The close environment includes family, community, school, and natural surroundings, providing the foundation for the initial development of creativity. Interactions with family members, diverse experiences in the community, and support at school shape the early stages of creativity (Chawla, 2015; Sharma, 2011; Yablon, 2015). The distant environment encompasses broader economic, social, technological, and environmental influences. Cultural influences, traditions, access to technology, and exposure to different art forms and media can broaden a child's worldview and foster imagination (Groyecka, Gajda, Jankowska, Sorokowski & Karwowski, 2020). The combination of these environments—immediate, close, and distant—provides a variety of influences that shape, nurture,