

# Principles Of Eco-Training In The Performance Of Early Childhood Teachers

Sandra Ciane Prawucki Micheluzzi<sup>1</sup>, Daniel Celeste Da Silva<sup>2</sup>,  
Adriana Pereira Benjamini<sup>3</sup>, Joel Haroldo Baade<sup>4</sup>

<sup>1</sup> Undertaking Master Degree At Professional Master's Degree In Basic Education, Alto Vale Do Rio Do Peixe University (Uniarp), Brazil.

<sup>2</sup> Undertaking Master Degree At Professional Master's Degree In Basic Education, Alto Vale Do Rio Do Peixe University (Uniarp), Brazil.

<sup>3</sup> Master At Postgraduate Program In Society And Development, Alto Vale Do Rio Do Peixe University (Uniarp), Brazil.

<sup>4</sup> Phd. Postgraduate Program In Society And Development, Alto Vale Do Rio Do Peixe University (Uniarp), Brazil.

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## **Abstract:**

*The purpose of this article was to discuss a training proposal based on the concepts of eco-training, as well as on the demands detected by teachers, aiming at the improvement and effectiveness of the Eco-Training Program through a collaborative evaluation process and its systematization, for later use as support in continuing education in Early Childhood Education Centers (CEIs) in the city of Massaranduba, in Santa Catarina State, Brazil. It was a research-action with a qualitative approach and exploratory-descriptive objective. The following data collection instruments were used: bibliographic research, a semi-structured questionnaire, and an unstructured interview. The research was developed in the context of the Professional Master's Program in Basic Education, in its Public Policies and Education Management line of research, which enabled the enhancement of eco-training concepts, in the continuing education of teachers, especially in the sense of collaborating for pedagogical practices that favored defragmented and contextualized training.*

**Keywords:** *Child, Eco-training, Early Childhood Education, Protagonism.*

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## **I. Introduction**

In today's globalized world, we experience actions that harm the environment every day and the result is the destruction of the planet. In addition to that, there is a continuous decrease in contact with nature and the use of increasingly artificial spaces.

Transforming this reality is a constant challenge, especially for education, as there is still evidence of fragmented and decontextualized teaching. For Velasco (2017), this raises the need to stimulate a reconnection between the school curriculum and the local and global reality. This process demands the performance of connected, up-to-date professionals and a flexible and innovative curriculum, overcoming the distance between theory and practice.

In 2018, the Eco-training program was implemented in the education of a city called Massaranduba and all teachers, advisors, managers and other employees, all members of the six schools and six Early Childhood Education centers which belonged to the municipality participated in this training.

The Eco-Training Program was implemented through a continuing education program, with aim at the formation of ecologically responsible citizens, focusing on the development of attitudes such as cooperation, responsibility, participation, autonomy, and respect.

As this program is still being implemented, some teachers have difficulties in integrating to it and some new teachers, recently arrived at these schools, are unaware of the program. In addition to that, there is the need to verify the contributions the program is making for the city's education so far, as well as to monitor its effectiveness and its importance for the municipality.

The implemented program presents results and with the intention of giving continuity and enhancing effectiveness so that it reaches even more, it is necessary to support the articulators in this process, by means of the construction of a training proposal that dynamizes the concepts of eco-training in the performance of the teachers of the Early Childhood Education Centers (CEIs) from the city of Massaranduba.

In this perspective, the following research problem is presented: what specificities need to be considered in the elaboration of a training proposal, so that the pedagogical articulators dynamize the concepts of eco-

training, in Early Childhood Education Centers (CEIs) in the city of Massaranduba and are able to continue the program started in 2018?

With the definition of the research problem, objectives that contemplate the resolution of the problem are sought.

Therefore, when analyzing the core of the problem, the following objective is defined: to elaborate a training proposal, based on the concepts of eco-training and the demands detected in the perception of teachers and pedagogical articulators, aiming at the improvement and effectiveness of the Eco-training Program, through a collaborative evaluation process and its systematization, for later use as support in continuing education, in Early Childhood Education Centers (CEIs) in the city of Massaranduba.

The following were defined as the specific objectives:

- (a) Contextualize the contributions of eco-training in the training of early childhood education teachers in the city of Massaranduba.
- (b) Check the demands that the articulators have about the Eco-Training Program, implemented in early childhood education, in the city of Massaranduba.
- (c) To build, through the questionnaires answered and the interviews with the articulators, a formative proposal, so that the concepts of eco-training are effective in the performance of early childhood education teachers in the city of Massaranduba.
- (d) Adapt the training proposal based on the notes of the articulators, who will evaluate it, so that, after the necessary changes, the pedagogical articulators can use the proposal, in order to disseminate the concepts of eco-training together with teachers and early childhood education assistants in the city of Massaranduba.

## **II Methodological Notes**

The qualitative study involved bibliographic, exploratory and research-action. Data collection was conducted through a questionnaire to contextualize the contributions and difficulties of eco-training. An unstructured interview was also conducted to survey the demands articulators had and, thus, a training proposal was built based on data collection, with the objective of boosting the concepts of eco-training in the performance of teachers of Massaranduba city.

After the training proposal was elaborated, it was evaluated with the articulators, who pointed out possible adaptations. After the necessary adjustments, the articulators can use this training proposal, for the strengthening and effectiveness of the Eco-training Program, together with the assistants and teachers of Massaranduba.

The subjects of the research were the articulators of the CEIs (managers and coordinators), who monitor and subsidize the eco-training program, in the municipal education of Massaranduba, and the teachers and assistants, who work in early childhood education there.

Because it involved professors, assistants and articulators, the research was submitted to the Ethics Committee, and terms were also used for free and informed consent, through which the participants authorized their involvement in the research.

From the data collection, comparative analyses relevant to the sequencing of the research were made to help develop the educational product. To facilitate its organization, the study was divided into stages, and the data were treated according to the systematization presented below:

First stage: the questionnaires answered by the teachers and assistants were analyzed to highlight the contributions and possible weaknesses that the Eco-training Program has been evidencing in early childhood education in the municipality of Massaranduba, and the data served as a reference in the subsequent stages of the research.

Second stage: demands were raised with the articulators and, based on the data collected, a training proposal was built, so that the concepts of eco-training could be put into effect in the work of early childhood education teachers from Massaranduba.

Third stage: the proposal was evaluated with the articulators, in order to make possible adjustments in the training proposal elaborated so that, after its conclusion, the pedagogical articulators dynamize the concepts of eco-training, together with the teachers and early childhood education assistants from Massaranduba.

Like all research, this one also implied some risks, among them: the discomfort of questioning (a question observed at the time the interviewee was being exposed). Once the discomfort was verified, the subjects studied could suppress their responses.

As a preventive measure, some fundamental precautions were taken, such as:

- a) In addition to the authorization of the participants, they were offered a comfortable and neutral space, made available with the purpose of offering more convenience to the participants at the moment of the interview to answer the questions.

b) the participants of the questionnaire and the interview were asked for authorization to use the data collected, making it clear that, under no circumstances, will the real names of the participants be disclosed.

### **III From Historical Reflections To The Breaking Of Paradigms: The Trajectory Of Early Childhood Education**

Several transformations occur in the world context, due to globalization, the economy, the advancement of technology and the increasingly capitalist world. Consequently, continuous economic changes have altered the functioning of families and the education of children in all social classes, and there is a need for the implementation of appropriate public policies. Likewise, in Brazil, there are also advances in the political and legal fields, regarding Basic Education, more specifically, in the stage of Early Childhood Education.

Before the 1988 Constitution, in Brazil, there was no legal framework that met the fundamental needs of children and adolescents. The end of the twentieth century, more precisely, the year 1990, was significant to the formation and evolution of the rights of children and adolescents in Brazil (Brasil, 1990), because it was in this year that the ECA (Statute of the Child and Adolescent) was created.

This document came to create rights and give protection to children and adolescents, according to the law: "art.1º This Law provides the full protection of children and adolescents" (Brasil, 1990, n.p).

From the moment that children and adolescents were recognized as subjects of rights, with rights guaranteed in the Statute of the Child and Adolescent (ECA), children began to rely on a multidisciplinary network, which created conditions of enforceability for the rights of children and adolescents, aimed at the defense and protection of their rights. but for this to happen, it was a long journey (Brasil, 2017).

Childhood in Brazil was built in the midst of exclusion and, thus, to investigate the roots of ECA, understanding the social process that took place to reach it and to understand the fundamental need to safeguard and invest in its improvement is also to seek a more humanizing and egalitarian society for all Brazilian children and adolescents (Souza, 2019).

In Brazilian history, we can cite four distinct moments in which we seek to portray the social perception of childhood: 1<sup>st</sup> the period between the time of discovery and the end of the Empire, marked by invisibility; 2<sup>nd</sup> the beginning of the First Republic until the last years of the Old Republic, focused on the social order; 3<sup>rd</sup> the Vargas Era until the end of the Military Regime and the 4<sup>th</sup>. the succession to the UN studies on the rights of the child, going through the change in basic assumptions, arising from these studies until reaching the present day, with the Statute of the Child and Adolescent, which excels in the Doctrine of Full Protection (Souza, 2019).

In this context, the concept of childhood has changed over time. The importance of family and family ties have also been culturally changing. With the paradigmatic changes, women, who were previously involved in domestic work, began to aspire to equal rights with men, working outside the home and receiving wages. With this new resignification of the family, there was a need for someone to take care of the child while the mother was away from her home.

And so, after the promulgation of the constitution in 1988, combined with the process of redemocratization of the country, with the end of the military dictatorship, the care of children from birth was established as a right of the child and his family, recognized even as a duty of the State, thus conceiving the child-citizen, driving a series of changes in the legal scenario (Brasil, 2018), which contributed to these new family patterns.

In the beginning, this stage was used more as a means of welfare. While the parents went to work, the children stayed in daycare centers, taking proper health care and hygiene. Two years after the promulgation of the Constitution, the ECA - Law 8.069/90 (Statute of the Child and Adolescent), affirmed the right of citizenship of the child, defining their rights to protection and education.

Subsequently, in 1996, the Law of Guidelines and Bases of National Education<sup>1</sup> - Law 9394/96, established that Early Childhood Education would become part of Basic Education, along with elementary and high school. According to the LDB (2017), in its article 29: "Early childhood education, the first stage of basic education, aims at the integral development of children up to 5 (five) years of age, in their physical, psychological, intellectual and social aspects, complementing the action of the family and the community" (Brasil, 2017, n.p).

At this moment, the stage of early childhood education is no longer only of a welfare nature, being focused not only on the physical needs of children, but also on their integral development, with practices being developed between care and education.

With the institution of the LDB in 1996, Early Childhood Education emerged as the first stage of basic education, bringing with it the importance of training and effective pedagogical work. Because of this, there was the need to implement a curriculum that contemplated care and education in an inseparable and complementary

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<sup>1</sup>The Law of Guidelines and Bases of Brazilian Education (LDB 9394/96), is the legislation that regulates the educational system (public or private) in Brazil (from basic education to higher education).

way, because by sharing this education with the family, this right is understood as a right of children and the responsibility of all those involved in Early Childhood Education.

Also, according to the amendment in the LDB, through Law No. 12.796, of April 4, 2013, the change made in the Constitution becomes official, through Constitutional Amendment No. 59/2009, which states in its article 6: "It is the duty of parents or guardians to enroll children in basic education from the age of 4 [...]" (Brasil, 2013, n.p), therefore, enrollment in early childhood education became mandatory from this age.

This was a historic advance in the trajectory of the educational system, since, for several decades or even centuries, the inequalities typical of the capitalist system, which marginalized the less favored, were perpetuated. However, during these advances, both in public education policies and in the organization of early childhood education institutions, the challenges were still many, especially in the field of practice.

However, the curriculum and guidelines in early childhood education have already permeated several discussions in the academic agendas and in the federal government itself. They also indicate that daily pedagogical practices are often systematized based on school-based teaching, without being based on the National Curriculum Guidelines (DCNs<sup>2</sup>), which suggest interaction with adults and other children, enabling them to:

The child, the center of curriculum planning, is a historical subject with rights that develops in the interactions, relationships and daily practices made available to him and established by him with adults and children of different ages in the groups and cultural contexts in which he is inserted. In these conditions, they make friends, play with water or land, make-believe, desire, learn, observe, talk, experiment, question, construct meanings about the world and their personal and collective identities, producing culture (Oliveira, 2010, p. 5).

Even with the indications of the guidelines, there was a lack of consonance to enable the integral development of the child. Thus, there was a need for further research, discussions, and guidance, as there was a need to elaborate and consolidate a document that contemplated the various areas of knowledge in the different institutions of early childhood education:

With the Base, we will guarantee the set of essential learning for Brazilian students, their integral development through the ten general competencies for Basic Education, supporting the necessary choices for the realization of their life projects and the continuity of studies (Brasil, 2017, n.p).

And, thus, the indispensability of a National Common Curriculum Base (BNCC) is justified, based on the logic of a fairer societal project, being defined as goal 7, in the current National Education Plan<sup>3</sup> (PNE, 2014, n.p): "to foster the quality of basic education in all stages and modalities, with improvement of school flow and learning [...]".

The National Education Plan (PNE, 2014) defines in its strategy 7.1:

Establish and implement, through an inter-federative agreement, pedagogical guidelines for basic education and the common national base of curricula, with rights and objectives for the learning and development of students for each year of primary and secondary education, respecting regional, state, and local diversity (Brasil, 2014, p. 61).

From the same perspective, the BNCC proposes ten competencies common to all basic education, namely: 1. Knowledge; 2. Scientific, critical and creative thinking; 3. Cultural repertoire; 4. Communication; 5. Digital culture; 6. Work and life project; 7. Argumentation; 8. Self-knowledge and self-care; 9. Empathy and cooperation and, 10. Responsibility and citizenship.

These competencies support the choices necessary for the realization of life projects and the continuity of studies, which will be guaranteed to Brazilian students, as well as their integral development.

The ten general competencies of Basic Education will be developed in the three stages of Basic Education, namely: Early Childhood Education, Elementary School and High School, with the intention of ensuring an integral human formation, as a result of the learning and development process, with the aim of building a just, democratic and inclusive society (Brasil, 2017).

However, in the Early Childhood Education stage, the BNCC establishes six learning rights: to live together, to play, to participate, to explore, to express and to know oneself. Similarly, the BNCC (2017) establishes five fields of experiences, considering the rights of learning and development, in which children can

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<sup>2</sup>The National Curriculum Guidelines (DCNs) are mandatory norms for Basic Education that guide the curriculum planning of schools and education systems. They are discussed, conceived, and set by the National Council of Education (CNE). Even after Brazil developed the National Common Curriculum Base (BNCC), the Guidelines continue to be valid, because the documents are complementary: the Guidelines provide the structure; the Base, the detailing of contents and competencies.

<sup>3</sup>In 2014, the Federal Congress sanctioned the National Education Plan (PNE), with the purpose of directing efforts and investments to improve the quality of education in the country. With the force of law, the PNE establishes 20 goals to be achieved in the next 10 years.

learn and develop: Oneself, the others and us; Body, gestures and movements; Traces, sounds, colors and shapes; Listening, speaking, thinking, and imagining; Spaces, times, quantities, relations and transformations.

According to each field of experience, learning and development objectives are organized into three groups by age group: babies (from zero to 1 year and 6 months); noticeably young children (from 1 year and 7 months to 3 years and 11 months) and young children (from 4 years to 5 years and 11 months).

The BNCC is guided by the National Curriculum Guidelines for Early Childhood Education (DCNEIs) and there are two modes of care, which mark the history of early childhood education: the assistentialist, in which children are only taken care of without the intention of educating, and the schooling, which is based on Elementary School practices, which consider the child in Early Childhood Education as a student who receives the curriculum and content that are not in the context of development of this age group (Brasil, 2017).

Thus, the path of Early Childhood Education goes through great challenges, driving constant changes and may result, for early childhood education, in overcoming "pragmatic and utilitarian schooling focused on immediate results" (Barbosa & Richter, 2013, p. 1).

In this way, the conquest of the right related to inseparable care and education, anchored in the possibility of developing quality learning in Early Childhood Education, guarantee the commitment to place the child as the protagonist of his actions, now seen as someone who has rights. In this way, it becomes the priority of all actions developed in the daily life of institutions, as it effectively becomes the end of a practice based on disrespect for the specificities of its development and this brings an expectation of changes and inspirations throughout the children's educational context.

Much has already been done during public policies in Early Childhood Education, but there is still a need for structuring and consolidating in practice research and studies that exist and permeate this field.

#### **IV Perspectives And Constant Challenges In Continuing Education Of Teachers In Early Childhood Education**

Amid multiple challenges that arise in the stage of Early Childhood Education, the continuing education of teachers is an essential and necessary theme, which requires flexibility and openness from educators to be able to reflect, analyze and understand the conception of learning and knowledge that determines their pedagogical practice.

The LDB (1996) calls early childhood education the "first stage of basic education", recognized as part of the educational process. This is a great achievement, because until then, it was considered a welfare practice. Through this, the zeal for teachers trained in the area become a priority, with knowledge of practices that emphasize the integral development of the child, in its physical, psychological, intellectual, and social aspects, complementing the action of the family and the community.

As the LDB regulates the educational process, it also emphasizes the importance of initial and continuing teacher training. Thus, it is recognized that initial training is not sufficient to meet all the specificities of the early childhood education curriculum, and there is a need for continuing education. It points to the relevance of thinking about teacher training in order to guarantee a quality theoretical-practical activity: "there is a consensus that no initial training, even at a higher level, is sufficient for professional development, which makes it essential to create systems of continuing and permanent training for all teachers" (Brasil, 1999, p.17).

Continuing education involves improvements in teaching practice, learning resulting from permanent updating, understood as a continuous and aggregated process, through the exchange of professional experiences, through the evaluation of mistakes and successes in the day-to-day of the profession (Pimenta, 2001).

The challenges of continuing education based on the integrality of the child are expressive, as they need to address the educational curriculum, the daily practice of this age group, its specificities, and particularities.

It is noteworthy that continuing education needs to meet the real weaknesses of early childhood education teachers and meet their anxieties, deficiencies, and anxieties. This is in line with the ideas shared by Imbernón, who criticizes courses in which the lecturer is the holder of knowledge, making teachers uncomfortable for they are seen as "ignorant people who attend sessions that intend to 'culturalize' them professionally" (2010, p. 29).

It is necessary to emphasize that educators are also developing beings and that they bring with them a personal and institutional history, marked by important experiences and knowledge, as a starting point in the construction of new knowledge and conceptions. This becomes crucial to relate its continuous improvement, including the stage of Early Childhood Education (Saviani, 2000).

At this stage, there are several particularities, so the teacher must be prepared and updated, both emotionally and physically, so that they can plan experiences and not feel frustrated, having the responsibility to intersperse pedagogical practices, relating this phase of children's life with the routine of hygiene, and feeding procedures.

It is understood, therefore, that the training of early childhood education educators needs to be based on increasing professional qualification, a determining factor for their updating, developing, procedurally, by the

continuous search for scientific, technical, research and political competence, knowing that they are mutually determinant for their educational practice.

### **V Eco-Training Of Early Childhood Education Teachers: A Proposal Aligned With The Ecosystem Paradigm**

In early childhood education, it is relevant to prioritize the integral development of the child without detaching the praxis of care from education. Because of this, there is the need to build values and concepts through meaningful learning.

However, if one is an heir to a Cartesian science, which prioritizes separation over connection, there is the preference to certain areas of knowledge, leaving in the background the person/person and person/environment relationships, but overvaluing reason and, thus, almost invalidating emotion.

In this scenario, there is a need for the implementation and insertion of new practices contextualized with the environment, and regarding this aspect, the ecosystem pedagogical trend can be mentioned. Through a transdisciplinary approach (typical of the ecosystem), we seek to reinvent school practices and invest in continuing education, based on a new educational model, which focuses on the constitution of individuals, who can interact with the diverse conditions of life in an ethical way (Suanno & Freitas, 2016).

Thus, in view of this conception, the ecological perception is presented, in which there is cooperation between person/environment and person/person, and seeks to value life:

Understanding ecological interdependence means understanding relationships. This determines the changes in perception that are characteristic of systems thinking—from parts to whole, from objects to relations, from content to pattern. A sustainable human community is aware of the multiple relationships between its members. Nurturing the community means nurturing these relationships (Capra, 2006, p.233).

Ecosystem thinking (Moraes, 2004), which comes from systemic theories, relates ideas such as: intersubjectivity; interactivity; intricacy; emergency; unpredictability; Self; autonomy; change; uncertainty; circular causality; inter and transdisciplinarity, thus not conforming to a Cartesian and mechanistic paradigm. Thus, to justify this practice, Suanno and Freitas speak of the importance of valuing the broader issues of society:

[...] Enable learning conditions that consider the categories context, global context, multidimensional and complex, because, in this way, knowledge becomes relevant to the student, creating conditions for the understanding of broader issues of society and an intervention for the prevention and solution of problems, thus exercising a critical citizenship. For this to be possible, the school must value inter and transdisciplinary practices that favor the collaborative construction of knowledge (Suanno & Freitas, 2016, p. 87).

So, there is the need to develop potentialities through practices that focus on the complex thinking, aligned with the ecosystem paradigm, which has been happening since early childhood education. For Moraes (2004, p. 42-43), the ecosystem paradigm is "[...] built from nurturing exchanges between the subject and the object, through dialogues, interactions, transformations and mutual enrichment [...]", for this reason, it advocates solidarity, inclusion and contextualized teaching that are so important from early childhood.

It is in this bias that the ecosystem paradigm is associated with complex thinking, given that it is based on the prognosis that "[...] there is no separateness, inertia or passivity [...]", because "everything is related, connected and in continuous renewal" (Moraes, 1996, p. 61).

Making the child the protagonist and participant in the planning, prioritizing their needs, their interests and transforming this phase, which is essential in their lives, with eco-training as a subsidy, becomes a possible path as students begin to assume a more sensitive and humanized look at the environment in which they live. Maintaining connectivity with nature and with the interaction of coexisting knowledge in groups reinforces eco-training, as a prerequisite for meaningful, contextualized, and effective learning.

In this way, eco-training can be understood "[...] as the education received and built at the origin of direct relations with the material environment: non-humans, elements, matter, things, landscape" (Silva, 2008, p. 101).

According to the author, the term eco-training began to circulate in the 1990s, under the influence of the Research Group on Eco-training and Education for the Environment, at the University of Montréal/Québec, articulating it with reflections on the applicability of the assumptions of Complex Thinking in the field of Socio-environmental Education. This research group was coordinated, at the time, by Gaston Pineau (Silva, 2008).

The foundations of eco-training began through studies in Europe, in Canada, with Pascal Galvani and in France, with Gaston Pineau, being the pioneers who worked together from the beginning. Eco-training, in fact, emerged for work in communities and then came to formal school education, with Saturnino de La Torre (2008) and Marlene Zwierewicz (2009).

Social and environmental relations need to be evidenced in the midst of several issues, which demonstrate the importance of a reflective continuing education, "[...] Eco-training as an expression of the transdisciplinary gaze offers us a dynamic, interactive and ecosystem view of education, contemplating the learner as part of a social and natural whole [...]" (Torre, 2008, p.43).

This new pedagogical trend has been gaining constant strength in Brazil, being strengthened through academic studies, through various approaches, discussions and systematized in the various means that involve education, standing out for its importance in the integral development of the human being, in the totality of the relationship between being and knowledge.

We live in a world moment, in which there is a need to take care of the environment to which one belongs, and this care needs to be established from early childhood. Eco-training broadens the worldview, so that the short-sighted and individualistic conception is abandoned, to open new possibilities of action through attitudes that involve collaboration and sustainability.

The need to consolidate an education that prepares for life and for life is stressed; starting from real problems and not simply from juxtaposed themes; that prioritizes the development of an awareness of personal, social and environmental-sustainable harmonization, stimulates the formation of resilient, socially entrepreneurial and creative people, capable of transforming adverse situations into opportunities, for the well-being of the local and global community (Torre, 2008; Zwierewicz, 2009).

Eco-training adds other values that:

[...] are aimed at forming citizens who value, respect nature, and promote social improvement, conscious, committed, creative, free citizens, with life projects, open to knowledge, love, and friendship, who have the pursuit of happiness as a vital reference (Torre, 2008, p. 34).

The commitment with life, freedom and happiness is a path that leads to eco-training, and eco-training highlights these desires that result from it. For Pineau (2006), it is necessary to understand that the development of education for the environment (environmental education) has a major influence and supports as much as possible the construction of an education for and together with the environment (eco-training), connecting human beings to their environment (natural and social).

Through eco-training, the child learns to be sensitive to nature and non-human beings, from an early age, so that he starts to feel part of nature, belonging to it, caring for it and integrating with it.

## **VI Creative Schools And The Methodology Of Eco-Formative Creative Projects**

Amid the transformations that occur daily, there is a need to insert in the educational context, pedagogical innovations that dynamize the practices of daily school life and that are in accordance with the needs of planetary sustainability. Thus, it seeks to stimulate relationships of solidarity and creative coexistence, which favor a synergy for the elaboration, execution, evaluation, and dissemination of projects related to the qualification of life on the planet.

The demands of the current reality show that the practices considered creative need to be based on eco-formation, that is, an integral formation of the human being, through his relationship with the world, with others and with himself (Torre, 2008).

Today's society has undergone changes in many aspects and, since the end of the last century, the transformation from the industrial society to the information society has been noticed. With these advances also comes the need to know how to deal with the unpredictable and to be in continuous search for innovative solutions in an innovative and creative way. Torre (2005, p.25) explains that "[...] Creativity is the bread of progress, the food of change, the generating potential of scientific, technological and human development." In view of this, the school has a fundamental role in the formation of creative, resilient, and enterprising citizens, who can solve problems through their school learning.

Saturnino de La Torre, PhD in Philosophy and Letters from the University of Barcelona, was the forerunner of the Creative Schools, as he always encouraged the awakening and interest in the proposal of these schools. Thus, he pointed out that it was "[...] I need to turn my gaze to other places, other lands, other institutions that are more playful and willing to commit to transformative education" (Torre, 2013, p. 147).

According to Torre (2009), the purpose of Creative Schools is to contribute to an education that meets the demands of the 21st century and to stimulate the development of consciousness, values, and creativity. The Institutional Program Network of Creative Schools-RIEC includes the following projects: a) Continuing Education for creativity and, b) Creative Schools: recognize and disseminate the innovative and creative potential of the school of the 21st century.

Velasco (2017) highlights the importance of the concepts of "complexity" and "transdisciplinarity", while Torre and Zwierewicz (2009) add the concept of "eco-training", forming a triad that permeates the proposal of Creative Schools.

The Ecosystem Paradigm is decisive in the elaboration and dynamization of Creative Schools, as it proposes a paradigmatic change, which overcomes institutionally consolidated practices, in order to favor an education linked to current demands and to meet uncertainties in relation to the future, bringing the responsibility of overcoming paradigms centered on fragmentation, highlighting the importance of thinking about the educational problem as a whole (Moraes, 2012).

By boosting the proposal of Creative Schools in institutions that value people and their diversity, we try to overcome challenges through shared creativity, through conditions for the collaborative implication of the development of innovative projects. Therefore, the proposal generates a climate of well-being, satisfaction, and involvement, valuing the best of each one, without underestimating collective needs (Torre, 2009).

In this way, the discussions on the proposal of the creative schools were stimulated by Saturnino de La Torre, while he coordinated the Didactic Research and Advisory Group – GIAD, at the University of Barcelona. This group has been working with creativity in schools since the 1980s.

While creating the proposal of Creative Schools from that decade onwards, Torre (2013) highlights conditions that preceded it, among them, the following activities coordinated by GIAD: the holding of a series of events; training courses; disciplines; research projects and publications, all connected to creativity (Torre, 2009).

A second period was developed when GIAD committed itself to the development of the Innovative Didactic Strategies for the Initial Training of Teachers Program – EDIFID, especially between the years 1998 and 2005. The main objective of the project was to stimulate creativity and innovation in the classroom through the creation of different didactic strategies, continuing the other activities already conducted so far (Torre, 2013).

From 2008 onwards, with the interaction of the then coordinator of the GIAD (Didactic Research and Advisory Group) of the University of Barcelona, Saturnino de La Torre, together with Brazilian researchers and professors, the proposal of Creative Schools was strengthened, creating a methodology on the principles of sustainability, ecology of knowledge and institutional integration of knowledge, committing, therefore, with the overcoming of academic fragmentation in the form of disciplines, which transferred it from the world of ideas and made it more dynamic from the reality of Brazilian educational institutions (Zwierewicz, 2013)

The IV Forum on Innovation and Creativity, organized by the GIAD group in Barcelona (June 2012), dedicated to Adversity and Creative Schools, can be considered as the seed germ that had taken root in Brazil and that gave shape to the International Network of Creative Schools (Torre & Silva, 2015).

This movement:

It is rooted in the subsoil of complex thinking, eco-training, and the transdisciplinary gaze, having as its antecedent the one previously expressed. As recognized in the Minutes of Constitution (March 28, 2012). Saturnino de La Torre proposes the creation of the International Network of Creative Schools (RIEC). This proposal has its antecedents in a line of work and research around the Network of Ecology of Knowledges, the Network of Transdisciplinary University Training (REDFUT) and the Network of Creative Schools, started in Barcelona in 2007, with pioneering experiences in the city of Orleans (Brazil)". It is currently based at the University of Barcelona, however, in each country there are reference centers for those groups that stimulate and promote it or establish institutional adhesions. It is open to new people, groups and institutions committed to a vision of education and school based on human development, without limitations of beliefs, languages, gender, or country (Torre & Silva, 2015, p. 17-18).

From this perspective, the RIEC-Network of Creative Schools aims to assist education professionals in search of educational practices that contemplate the perspectives of eco-training and transdisciplinarity (Torre & Silva, 2015), in addition to contributing to an education attentive to the present needs of the twenty-first century, through the development of awareness, values and creativity (Torre, 2009).

Creative schools are those that transcend, recreate, value and can transform reality through their shared goals (Torre, 2013).

They are characterized by a dense network of ideas that enable transformations in educational contexts through the coexistence of projects, actions, and heterogeneous relationships (Torre, 2009). They are educational organizations that overcome the barriers of knowledge, which recognize the best of each one, seeking individual, social, and planetary well-being (Torre & Zwierewicz, 2009).

From this concept, the first project in Barcelona emerged in 2004. In 2009, the first meetings of creative schools took place in the city of Orleans/SC and their official recognition by the Association of Creative Schools, in 2018. Since then, RIEC has had numerous nuclei and connection points, which bring together education professionals from different educational levels with the purpose of investigating, training, and "pollinating" creative values (Torre, 2019).

Pollinating, in its literal sense, implies "taking the pollen from the anthers to the stigma of the flower", that is, applying the meaning of the term to the issue of creativity, it is urgent that, its very condition of generating originality and innovation, points out the elements capable of explaining it (Ribeiro & Moraes, 2014). RIEC promotes research-transformation-action projects on eco-training, environment, sustainability, and others.

In 2009, the first work on Creative Schools in the Brazilian context appeared, with the launch of the book "A school for the XXI century: Creative Schools and resilience in education". The work systematizes theoretical assumptions and the idea of network. This emerges as an expression of the Creative Schools Movement and has three main objectives:

1st. Create a collective consciousness of change.



2nd. Generate transformative actions.

3rd. Promote research and pollination actions.

In this work, the structure of the PCE is also presented, as a methodological possibility to dynamize the proposal of the Creative Schools.

Creative schools encourage transformations by their own example, because by pollinating their actions, they arouse interest and encourage other institutions to follow other paths. RIEC is concerned with bringing its knowledge to those who aspire to a critical and liberating education, and based on the elaboration and development of research, encourages publications, seeking:

[...] learning processes based on the experience of democratic, dialogical, and aesthetic fruition practices. Based on human values, solidarity, social responsibility, environmental responsibility, autonomy, equality, social justice, human rights, freedom of expression, democracy, ethics, harmonious coexistence, which favor the development of an inner conscience (Suanno, 2014, p. 27).

Creativity, autonomy and protagonism are concepts prioritized in education and systematized in eco-training. In order to relate theory and practice and, consecutively, to bring curriculum and reality closer together, the methodology of Eco-training Creative Projects (PCE) was born and, as stated by Torre and Zwierewicz (2009), they reflect on an education based on life and for life.

In this context, creativity is not a mere transmitter of culture, but a human potential with educational and social value that needs to be fostered and stimulated in educational institutions. Creativity is the driving force and creator of new generations of free, enterprising, supportive, collaborative citizens, concerned with the sustainability of the planet (Torre, 2019).

PCEs are based on the autonomy, transformation, and collaboration of the person, contributing to the construction of the human being in the human, social and environmental aspects (Zwierewicz & Torre, 2009).

These schools encompass the concept of innovating, not only in the sense of creating something new, but also integrating old knowledge in a current and dynamic way, with a new look, based on the Eco-training Creative Projects, through which training goes beyond the contents and turns to critical and sustainable values and attitudes, perceiving the teacher as a mediator with an open and flexible posture with the student as the protagonist (Reikavieski, 2019, p. 151).

The PCEs bring fundamentals of eco-training by enhancing and disseminating various attitudes, such as: awareness; analysis of reality; problematization; setting goals; feeling and thinking about the action; sequencing of activities; recognizing; valuing; enhancing; pollinating and, thus, building educational actions in a significant way (Zwierewicz & Torre, 2009)<sup>4</sup>.

## **VII. Strengths And Weaknesses Of A Project Under Development**

With the implementation of the Eco-training Program in the municipal education of Massaranduba in 2018 and 2019, there was a need to capture its potential and weaknesses in pedagogical practice, on a daily basis, in the group of teachers of Early Childhood Education Centers and to evaluate what is working properly and what needs to be improved.

The questions about it addressed a questionnaire, and based on that a table was created to compare the participants' answers. These were the questions made:

- From the Eco-Training Program (PCEs), implemented in the city of Massaranduba, what potential do you observe in your pedagogical practice, in the group of teachers, in your CEI?

- What weaknesses do you still find in the Eco-Training Program (PCEs), and do you perceive in your pedagogical practice, in the group of teachers, in your CEI?

We could see, by the answers of the participants, that things for some are potentialities, for others may still be fragilities.

One of the confrontations that appears in both camps is the issue of spaces. In some daycare centers in the municipality, the external spaces are large and, in this way, become a creative potential for the realization of eco-training practices. On the other hand, in other daycare centers, the external spaces are very small and thus limit the children's contact with nature, and there is a need to create other alternatives.

In the document Quality Parameters for Early Childhood Education, volume 01, of the Ministry of Education, the author Tiriba (2005) explains the importance of creating conditions for children to enjoy life outdoors, learn to know the nature in which they live, realize that human attitudes have repercussions on their actions and thus need to be encouraged, so that they develop attitudes of preservation and respect for biodiversity, defending the conception of education, in which the human being is part of nature.

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<sup>4</sup> For a more in-depth theory on the characterization of Ecoformative Creative Projects – PCE and their Conceptual Organizers, the master's thesis, by the author Sandra Ciane Prawucki Micheluzzi (2021), can be consulted.

Institutions that have small outdoor spaces can take advantage of them to the fullest, transforming them into eco-training places, with the use of natural elements, offered for the child to play and explore. There is also the possibility of taking walks in places where there are green areas, to provide children with contact with nature, to explore these spaces as learning spaces.

And when we talk about learning spaces, we also evaluate the child and his integral development, being one of the potentialities presented in the answers obtained by the participants, or rather, "thinking and rethinking the practice" of the teacher. In this context, Morin (2000) states that it is necessary to articulate the contextual, global, complex, multidimensional, and transdisciplinary dimensions, through the choice of pedagogical practices, where there is contextualization of knowledge.

This rethinking of practices at the beginning can cause discomfort, because when you have stereotyped practices, without thinking about the context in which the child lives, this can cause resistance to change by breaking these paradigms. This is one of the weaknesses presented in the participants' answers.

Thus, there is a need to confront the old paradigms, to rethink what has been repeated for a long time, to begin to see within oneself and learn something totally new, through an innovative methodological tendency, which brings educational practices that are based on learning from life and for life (Torre & Zwierewicz, 2009).

Eco-training is a pedagogical trend that highlights the search for new practices contextualized with the environment and, reinventing school practices, through a transdisciplinary approach that involves children in the learning process, encourages the child to develop integrally. This transforms education into an education connected to their experiences.

The development of the child in an integral way brings up a question about the potentialities highlighted in several of the participants' answers, which is the "protagonism of children". The eco-training methodology brings this concept together, which challenges the child to think, to play autonomously, to build their thinking, to use the complexity intertwined with transdisciplinarity, thus breaking the paradigm that the teacher is the center and makes him a mediator of the process of knowledge construction by the child.

However, for this protagonism to happen in the day-to-day life of Early Childhood Education institutions, when observing and relating the participants' responses, there is still a need for training both for new professionals and for those who are part of the network.

Pimenta (2001) points out that continuing education should be understood as a continuous process, with the purpose of improving the aggregate teaching practice through the exchange of experiences among professionals, evaluating the successes in the daily routine of the profession.

Regarding the potentialities presented, the continuing education proposed by the Eco-Training Program brings to teachers a new way of looking at their praxis through diversified practices, reinforces the importance of exploring play, provides interactions with other children, seeks the use of alternative materials, and encourages and values the protagonism of children.

It is possible to highlight as a potential "sensitization and attention to children", when planning eco-formative practices in Early Childhood Education institutions, through the methodology of PCE, which are based on real problems and seek the development of an awareness of personal, social, and planetary harmonization.

The PCEs work in a creative perspective and seek to build new knowledge, being highlighted by the participants, as potentialities, collaboration, and dialogue between those involved, joint planning, and the participation of families and the community.

The Eco-Training Program is part of a continuous process and thus it is relevant for its strengthening to seek the support of the articulators and professionals who participated in the initial training, whether through sharing, exchange of ideas and educational practices, clarification for the families about the fundamentals and importance of the program, the union, and the commitment of the entire group for its effectiveness.

Much has already evolved when observing the potential conquered through the implementation of the Program, therefore, the concepts and fundamentals of eco-training are part of the reality of early childhood education institutions in the municipality of Massaranduba. Pointing out the weaknesses makes it easier for the articulators, who will be able to take advantage of the information, to support and encourage where there is still a need for restructuring and monitoring.

### **VIII. Final Considerations**

The Eco-training Program has been developed in the municipality of Massaranduba since 2018. This began through continuing education offered to all members of the municipal network. After the training, the program was continued in the institutions, through the methodology of the Eco-training Creative Programs. This program brought a differential to Massaranduba education and, therefore, it is important to emphasize the importance of continuing and reinforcing its principles.

The research resulted in an educational product, in the form of a formative proposal, which met the demands of the Professional Master's Degree and helped in the potentiation of eco-training concepts in the

continuing education of teachers, especially in the sense of collaborating to overcome fragmented and decontextualized pedagogical practices.

It can be affirmed that, based on the research conducted, there was affirmative evidence in relation to the program, with the participants' acceptance to continue it and make it part of the curriculum. The proposal had a remarkably prominent level of acceptance by the articulators, who pointed out several essential elements that supported the proposal.

## **IX. Support/Funding**

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