FORMATION OF A LEARNING COMMUNITY IN PEDAGOGICAL AGROFOREST

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**Abstract:** This research aimed to investigate the development of participants in a core learning community that uses group dynamics functions integrated with values, through ecological learning in a pedagogical agroforestry with a focus on human relationships and the environment. The study was carried out with 41 participants, the community and students of a municipal elementary school located in the rural area in the countryside of the State of Mato Grosso, during 12 months. The research was guided by the following question: are there changes in human relationships in a learning community that applies values-integrated group dynamics functions? For the methodology, we opted for a qualitative approach, action research (THIOLLENT, 1685), with the use of observation scripts for the data collection process. The theoretical framework was based on studies by Pacheco (2021), Lima (1969), Götsch (1995) among others. The results of the research indicated changes in values in human relationships (autonomy, respect, among others) and showed the beginning of the process of consolidation of the group dynamics functions for the construction of the experience in cooperation. Based on the results of the survey, the participants showed an interest in continuity and prepared an Action Plan - 2022, for community training and humanizing learning with the methodology of learning community in pedagogical agroforestry, with the insertion of learning circles.

**Keywords:** Human relations, Environment, Learning Community, Group Dynamics, Values.

**INTRODUCTION**

In Brazil, there are numerous challenges that drive educators and communities to find solutions that can guarantee the students’ learning process so that they have the possibility to generate new knowledge and, at the same time, develop skills in the field of human relations and the environment to a conviviality that is close to human excellence and the appreciation of life.

In this perspective, a Municipal School located in a rural district in the interior of the State of Mato Grosso, which serves elementary school students in the initial and final grades, and a non-profit Association, based for over 30 years in the local community, aimed at training in human relations and the environment, established a partnership, considering the need for work focused on establishing attitudes that would provide an experience with dialogue and cooperation between the inhabitants of the community, as well as the preservation of the environment, since the district has been affected by deforestation, drought, fires, pesticides in an area of cerrado.

From the conversations, a proposal emerged for the development of a core learning community linked to a space for cultivating an agroforestry with actions aimed at human relations. In this perspective, the following research question became clear: are there changes in human relations in a learning community that applies values-integrated group dynamics functions? In this sense, the objective of the research was defined as investigating the development of participants in a core learning community that uses functions of group dynamics integrated with values, through ecological learning in a pedagogical agroforestry with a focus on human relations and the environment.

To this end, a project called Pedagogical Agroforestry was proposed, based on the proposal of experience and formative learning in the construction of human relationships and the environment, gestated in a community that was constituted through mediation, exchanges, interactions and pedagogical and ecological training, based on
values, functions and group dynamics, where the learning reference is for life and for life in all its integrality from the environment to the human.

**METHODOLOGY**

A qualitative research methodology, action research, was used. The target audience of the research was 5 teachers from the Municipal School who joined the proposal, teachers Lisoneide da Guia Xavier, Magna Cátia Osuna, Juarez Viana Ferreira, Rodrigo Barbosa da Silva and 1 (one) director, Junior Rodrigues dos Santos, in partnership with 16 parents, 11 children and 8 specialists in education and human relations from the non-profit Association.

To this end, the following actions were carried out in the stages of: 1. **Planning**: proposition of practical agroforestry activities with students, parents and school employees and the constitution of a Learning Community Center with teachers who adhered to the proposal and members of the Association, inserting the construction of values and group dynamics functions; 2. **Action**: took place during the period of the COVID 19 pandemic, through online meetings and in the school’s agroforestry; 3. **Observation**: in the data collection process throughout the theoretical and practical period, observation scripts were developed as a tool for identifying evidence that guided actions to obtain the resulting proposals in the research objective; 4. **Reflection**: in the reflection process, the analysis of evidence found throughout the development of the Project and its articulation with the theories that underpinned the present work was used.

**THEORETICAL REFERENCE**

To theoretically support the present investigation, studies related to the themes of Learning Community, Human Relations, Group Dynamics, Values and Environment were deepened.

For Pacheco, “[...] learning community is a group that interacts with each other and establishes social relationships, during a certain period, with the purpose of learning a concept of common interest” [...] (2014, p 103) The educator mentions that pedagogical devices such as Values, Axiological Matrix, Charter of Principles and Coexistence Agreements need to be implemented by the school community (PACHECO, 2021).

In this approach, it is also observed that learning starts from the focus of interest of the student, who builds his own research script and deepens his knowledge from generating questions asked by the tutors and the community, building a portfolio with the presentation of the learned content (PACHECO, 2021). All of these changes in educational methodology help move from the instruction paradigm to the learning paradigm with a focus on human relationships.

For Freire and Maturana, human relationships are fundamental for the formation of the human subject. Relating is a human need, therefore, it is a humanizing action. We understand as humans in a human doing among humans. We are human in acceptance, not rejection. Therefore, love must be understood as a tool that humanizes each other in dialogic relationships (MATURANA, 2005; 2015 apud VIEIRA, 2020, p.22).

Within the context of human relations, according to Lima (1969), the technology of group dynamics makes it possible to build cooperation between members of a group. The author also addresses that the establishment of functions within a group makes it possible to level relations, helping to build equality among members, who become more active and impelled to take responsibility for group construction, favoring the development of autonomy, commitment and qualification.
through values.

“The group motivates the individual and the individual motivates the group: the individual learns from the group and the group from the individual” (LIMA, 1969, p.105).

Pacheco understands that “A value is an ethical foundation, which guides human behavior and is translated into a single word.” (2021, p. 34), for him, each human being lives the value that he built in himself, so that values guide our behavior.

With regard to the environment, the ecology model passed on along with the Pedagogical Agroforestry Project, follows in line with the syntropic agriculture of Ernst Götsch (1996), with that ecology would act in a beneficial way for all beings, in balance with the nature, in syntropy, developing the ecological sense of love and cooperation.

Agriculture, this way, becomes an attempt to harmonize human activities with the natural processes of life existing in each place where we operate. To achieve this, there needs to be a fundamental change in ourselves, a change in our understanding of life (GÖTSCH, 1996, p. 5).

**RESULTS AND DISCUSSION**

The project envisaged the character, tutor, represented by the teachers of the Municipal School who adhered to the proposal and by the members of the Association, who met weekly, thus constituting the Community Ecological Pedagogical Nucleus, to prepare the Charter of Principles with the Axiological Matrix of Project, built with coexistence agreements (practices of the values assumed by the members of the Nucleus), the exercise of the assumption of cooperative functions, organization of neighborhood circles (identification of the educational potential of the community), with reference to the place of residence of tutors and apprentices.

The community’s knowledge was mapped: what does the community have to learn from knowledge and experience? Baker; carpenter; bricklayer; regional herbalist; nurse; pharmaceutical; fish farmer; dressmaker; hairdresser; merchant; electrician; tire repairer; confectioner (cakes); bicycle mechanic; cassava flour; producer of molasses and brown sugar.

In the next step, after shifts, the first movement was constituted, the tutorials, a central device in the transition from the paradigm of instruction to that of learning and communication. Each tutor invited and took responsibility for their apprentices, starting the research projects and scripts, working on human values in practice, as well as the research methodology, including self-planning (autonomous management of time/space) and actions in the Agroforest space. There were nine tutors, four from the association and five from the school. Of these, four took on the tutoring of eleven apprentices. The other tutors acted as trainers and followed the process of the Community Ecological Pedagogical Center according to time availability.

In the agroforestry laboratories, the apprentices prepared the space, observed nature, planted and had this interaction with taking care of the space, in addition to learning the practices of syntropic agriculture. In these actions, they practiced the responsibility of the assumed functions. It was the beginning of an articulated human relationship with the environment.

In the interaction in space, the interest of the content that they would like to research was born, such as: a. Ant; B. Soil Conservation; ç. Beet planting, d. Water oxygenation; and. Butterflies, f. Agronomy, among others. They verified the importance of functions for the organization of the group and the creation of coexistence agreements for the practice of values in the relationship between them.
As a result of the planting, in this period of the research, the collection of bananas, pineapples, cassava, okra, produced in the cultivation techniques of syntropic and healthy agriculture, which implemented the school lunch and had part of the production donated to the community, which brought joy to the project participants. It was evident that, even in soils that were previously worn out, the dynamics of the succession of natural species plays an important role in guaranteeing the health and vigor of cultures.

All the development and results of the apprentices were monitored and discussed by the tutors in the weekly meetings of the Nucleus, with records of the activities developed, portfolios elaborated throughout the research process.

**FINAL CONSIDERATIONS**

The studies contributed to understanding the need for a cultural change towards a more sustainable habit, in which each human being assumes responsibility for the planet and its preservation. Only something that is loved is preserved, and only something that is known is loved, and for this reason it is fundamental that children, in their education, know the biological processes, the plants, the animals and the agroforestry in harmony with life, built from the functions of group dynamics and values to arrive at the quality of human relationships.

The constitution of the Learning Community Nucleus, which uses group dynamics functions integrated to values, through ecological learning, indicated the development of participants, both tutors and tutors, evidenced in the commitment and enthusiasm during the research, greater disinhibition in to expose themselves in a group, gradual improvement in the organization of thought and communication in a clear improvement in the field of relationship between them.

It awakened and motivated the search for preservation, attention and care for the environment in their form of coexistence and interaction, through the practices that the apprentices, when participating in the planting, irrigation and handling in the agroforestry, proposed to be part of the process, sharing tasks, learning about the functions in the group dynamics, questioning, seeking answers, evaluating the benefits/difficulties and suggesting ways to improve and solve problems in continuous and systematic construction of learning and the relationships between them. It was considered, based on experiences and lessons learned, that the true ethical commitment is that of a Human Being.

For the year 2022, the researchers are dedicating themselves to the action plan of the Pedagogical Agroforestry Project, through the Community Ecological Pedagogical Nucleus, integrating community training and humanizing learning with the methodology of self-built learning community. In this proposal of learning circles, they integrate series and cycles due to their systemic practice and human relations through values and functions, which are developed in experiential circles of learning and practice with workshops, group dynamics and integration with the environment. The purpose is the pedagogical and ecological formation of the Human Being, in the joy of learning in the practice of doing good.


PACHECO, José. Plano de Inovação: cocriação de protótipos de comunidades de aprendizagem e projeto de formação na modalidade círculo de estudos, 2021. No prelo.
