

Greening Education and Waldorf Education: Dialogues and Practices in a school on the coast of Bahia

Ambientalização e Pedagogia Waldorf: diálogos e práticas em uma escola do litoral da Bahia

Ambientalización y pedagogía Waldorf: diálogos y prácticas en una escuela de la costa de Bahía

Sandra Sylvia Santana Ziegler¹
Dayane dos Santos Silva²

Abstract

Owing to concerns regarding human relations with the environment and the degradation and exploitation of nature, various Environmental Education initiatives have been developed over the years in formal basic education to contribute to a harmonious coexistence among them and address the environmental crisis. This study aimed to understand the greening education process of a Brazilian Waldorf school in dialogue with Steiner principles, as well as the concepts and practices related to the socio-environmental issue. We opted for qualitative research and approximations adopting ethnographic approach strategies. Systematic observations of daily life, document analysis of the Pedagogical Political Project, and semi-structured interviews with teachers, students and employees were carried out. Based on the data analysis, we concluded that the Waldorf educational concept contributes to: valuing inter-trans-disciplinary work; equal importance given to curriculum disciplines in cognitive, biological-technological and practical-artistic development; a sustainable infrastructure; a participatory and cooperative management, without hierarchies, including the active participation of parents and teachers in implementation and school evolution. These experiences provide training for citizenship and sustainability throughout the children and young people's educational process.

Keywords: Environmental education. Waldorf school. Anthroposophic philosophy.

Resumo

Decorrente das preocupações referentes às relações humanas com o meio ambiente e a degradação e exploração da natureza, diferentes iniciativas de Educação Ambiental têm sido desenvolvidas ao longo dos anos no contexto da educação básica formal, a fim de contribuir para uma convivência harmônica entre eles e o enfrentamento da crise ambiental. Este estudo teve como objetivo compreender o processo de ambientalização de uma escola Waldorf brasileira em diálogo com os princípios steinernianos e com as concepções e práticas vinculadas à questão socioambiental. Optamos pela pesquisa qualitativa e aproximações com as estratégias da abordagem etnográfica. Foram realizadas observações sistemáticas do cotidiano, a análise documental do Projeto Político Pedagógico, e entrevistas semiestruturadas com docentes, alunos e funcionários. A partir das análises dos dados, concluímos que a concepção educativa Waldorf contribui para: a valorização dos trabalhos inter-trans-multidisciplinares; a igualdade de importância dada às disciplinas curriculares no desenvolvimento cognitivo, biológico, tecnológico e da prática artística; uma infraestrutura sustentável; uma gestão participativa e cooperativa, sem hierarquias, com a participação ativa de pais e professores na implementação e evolução escolar. Essas experiências, ao longo do processo educativo de crianças e jovens, possibilitam uma formação para a cidadania e a sustentabilidade.

Palavras-chave: Educação ambiental. Escola waldorf. Filosofia antroposófica.

¹ Institute of Education at the University of Lisbon, Portugal. E-mail: sandra.ziegler@edu.ulisboa.pt

² Pós-doutoranda no Instituto de Física e Química da Universidade Federal de Itajubá (UNIFEI), câmpus Itajubá, Minas Gerais, Brasil. Bolsista CAPES/BRASIL. E-mail: dayane@unifei.edu.br

Resumen

A partir de las preocupaciones respecto de las relaciones humanas con el medio ambiente y la degradación y explotación de la naturaleza, a lo largo de los años se han desarrollado diferentes iniciativas de Educación Ambiental en el contexto de la educación básica formal, con el fin de contribuir a la convivencia armónica entre ellos y al enfrentamiento de la crisis ambiental. Este estudio tuvo como objetivo comprender el proceso de ambientalización de una escuela Waldorf brasileña en diálogo con los principios steinerianos y con los conceptos y prácticas vinculados a las cuestiones socioambientales. Optamos por investigaciones cualitativas y aproximaciones a las estrategias del enfoque etnográfico. Se realizaron observaciones sistemáticas de la vida cotidiana, análisis documental del Proyecto Político Pedagógico y entrevistas semiestructuradas a docentes, estudiantes y personal. Del análisis de los datos, concluimos que el diseño educativo Waldorf contribuye a: la valorización del trabajo interdisciplinario; la igual importancia otorgada a las materias curriculares en el desarrollo cognitivo, biológico, tecnológico y de las prácticas artísticas; una infraestructura sostenible; Gestión participativa y cooperativa, sin jerarquías, con la participación activa de padres y docentes en la implementación y evolución escolar. Estas experiencias, a lo largo del proceso educativo de niños y jóvenes, brindan formación para la ciudadanía y la sostenibilidad.

Palabras clave: Educación ambiental. Escuela waldorf. Filosofía antroposófica.

1. Introduction

The field of Environmental Education (EE) has received “considerably more attention in recent years as contested notions of environment and Sustainability have become common topics of conversation among the public, the subject of media interest, and the focus of much political debate and legislation” (Stevenson *et al.*, 2013, p.1). Over the years, different initiatives have been developed with and in the context of formal basic education (Domingos; Silva, 2020; Reis *et al.*, 2021; Araujo; Modesto; Santos, 2016), aiming to contribute to a harmonious coexistence between human beings and nature and to face the environmental crisis (Yang *et al.*, 2022).

We highlight Waldorf Education (WE) as it is considered an educational orientation, based on the anthroposophic philosophy, proposed and developed by the Austrian philosopher and educator Rudolf Steiner (1861-1925). Anthroposophy, which originally comes from Greek and etymologically means knowledge of human beings can be characterized as “a method of knowledge of the nature of human beings and the universe, which expands the knowledge obtained by the conventional scientific method, as well as its application in virtually all areas of human life” (SAB, 2023). Considering this, Steiner contributed to sectors of human knowledge such as education, medicine, economics, architecture, ecology, agriculture, social organization, and art, among others (Steiner, 2012a).

The anthroposophic conception of education is based on the assumption of “[...] a profound knowledge of the development of human beings upbringing [...] goes from the total unconsciousness of the newborn to the total consciousness of the twenty-one year old [...] allowing the individual to be a completely responsible and free entity” (Lanz, 2016, p. 58-59).

Anthroposophy divides human life into seven-year cycles known as seven years, marked by physical, psychic and spiritual characteristics. Considering this, it is through education that one seeks to develop and harmonize the three human activities through which man relates to the world: thinking, feeling and willing (Steiner, 2012a).

Based on Steiner’s educational principles, the first school was founded in 1919 called “*Freie Waldorfschule Uhrländshöhe*” in the city of “Stuttgart, Germany, to initially serve workers’ children at the Waldorf-Astoria cigarette factory (which gave rise to its name), and later expanded to other regions and continents of the world” (Fadel; Souza, 2019, p.96). One of the main characteristics of a Waldorf school is “[...] that of being a living body, susceptible to

assuming different forms and aspects, according to the concrete circumstances of a certain social environment of a country, of a current legislation in terms of education etc.” (Lanz, 2016, p.115).

According to Steiner’s theory of the Threefold Social Organism based on the motto of the French Revolution (Liberty, Equality and Fraternity), liberty refers to schools that are self-managed and independent from each other; equality concerns the political and legal dimension, both in relation to the law, guidelines and national regulations and to teacher remuneration; and fraternity refers to the economic sphere, in which the school must be maintained by associations constituted by its founders and parents of students enrolled in the school, in addition to being non-profit (Lanz, 2016).

Since its creation to the present day, Waldorf schools have grown continuously, despite having been banned during the Second World War and in Eastern European countries during the communist regime (SAB, 2023). Currently, “there are 1270 Waldorf and Rudolf Steiner schools in 80 countries and 1928 Waldorf Kindergartens in more than 70 countries” (Waldorf Word List, 2024, p.6). Europe is the continent with the highest number of Waldorf schools 68.90% (862 schools), in which 20.15% are in Germany, followed by the Netherlands with 9 schools, 92%, on a global scale (Waldorf Word List, 2023). On the American continent, the United States of America has 10% (Waldorf Word List, 2023), while in Brazil, there are 37, mostly concentrated in the State of São Paulo. However, there are some educational institutions that “adopt Waldorf Education, but that have not yet met all the requirements required by the Federation of Waldorf Schools (FEWB in Portuguese), which are, therefore, denominated “Waldorf inspired” or “in Waldorf construction” schools” (Fadel; Souza, 2019). Considering the development of Waldorf education, the following question is asked, “will their growth continue to be exponential or will they stabilize or even succumb to modern pressures?” Or “is there a universal essence of Waldorf education that can be recognized in different social and cultural contexts (Stehlik, 2019, p. 217).

Based on the Steiner’s educational conception, Waldorf schools emphasize human development continuously and intensely throughout a student’s school life, raising awareness and interacting with nature. This process aims to emphasize interdisciplinary practices in a school routine that contribute to critical reflections regarding on the relationship between human beings and nature.

The Waldorf pedagogical practice and EE complement each other in their ethical, participative and solidary principles by the thematization of nature, the social and subjective aspects conveyed in the socio-educational processes that reverberate in the school community and lead to a proposal that contributes to the greening education process.

Waldorf education has enabled pedagogical experiences that can support human formation in the search for a new paradigm that enables changes in relationships in and with the world. This research aimed to understand the greening education process of a Brazilian Waldorf school in dialogue with Steiner principles and with the concepts and practices related to the socio-environmental issue³.

2. Methodological Procedures

2.1. Type of research

This is qualitative research (Bogdan; Biklen, 1994, p. 11), which can be understood as “an investigation methodology that emphasizes description, induction, grounded theory and the study of personal engagement”. In addition, we carried out approximations with the strategies

³ This research is the result of a master’s dissertation.

of the ethnographic approach (Hammersley, 2017; Lüdke; André, 2013). According to Hammersley (2017, p. 3) “looking at the methodological literature, we find that the term ‘ethnography’ is defined in a variety of ways” and these definitions “they vary considerably in character, and behind them lie some fundamental divisions”. There is “a reasonably comprehensive list of the features that are often ascribed to ‘ethnography’” (Hammersley, 2017, p. 4):

- relatively long-term data collection process,
- taking place in naturally occurring settings,
- relying on participant observation, or personal engagement more generally,
- employing a range of types of data,
- aimed at documenting what actually goes on,
- emphasises the significance of the meanings people give to objects, including them-selves, in the course of their activities, in other words culture, and
- holistic in focus.

During the development of this research, some of these characteristics guided our study, such as the interaction relationship between observers and research participants built in the context of the Waldorf school based on participant observation, analysis of curricular documents and interviews. These made it possible to analyze the multidimensionality involved in the educational proposal of the Brazilian Waldorf school investigated in this study.

2.2. Research setting

The research was carried out in a school located in the Brazilian coastal region, in the Atlantic Forest biome. The school offers places for students from kindergarten to the 8th grade of Junior High School, in which teachers, employees and some parents of students work offering their skills as volunteers.

Structurally, the school has spaces such as a large outdoor courtyard and another covered patio, a reception, a meeting room, a canteen, bathrooms for students and staff, a kindergarten in an anthroposophical architectural construction with two kindergarten classrooms and one classroom for each year of Junior High School. Classes are held in the mornings and there is recess for the children so that they can have a healthy snack and lunch. In the afternoon, extracurricular activities are offered (Figure 1).

Figure 1: Facilities of the school studied in this research. 1A Side view of the school.
1B Area view of the school building



Source: Collection on the school's website (www.dendeserra.org.br) (2024)

Following the self-management principles of Waldorf pedagogy, the school belongs to a non-profit association, responsible for its financial provision, which relies on investments from companies and a child sponsorship system. In this system, members of the society can partially or fully fund the education of some students, with a voluntary contribution, in addition to monitoring the development of these sponsored students.

The school serves 204 children from different social classes who live in the region, and about half of them live in unfavorable economic conditions and receive a full scholarship.

Our research involved students from the 7th and 8th grades of Junior High School (aged from 12 to 14 years old), teachers, education specialists (Tutors) and employees (Table 1). The choice of these grades is due to the seven years of human development of the students, in which profound physical and emotional transformations take place and in their relationships with the world, “it is from this moment on that they are fully part of the outside world” (Steiner, 1987, p. 238).

Table 1: Number of participants interviewed in the research

<i>Role in school setting</i>	<i>Quant.</i>
Students who completed 7th and 8th grades Junior High School	28
Teachers	6
Education specialists (Tutors)	1
Employees	3
Total	38

Source: elaborated by the authors (2017)

2.3. Data collection procedures

After presenting the research in more detail, it was approved by the school management. Data collection focused on the pedagogical process, the school setting and the management dimension, obtained from the following data collection strategies and instruments:

- Documentary analysis of the school's Pedagogical Political Project (PPP) and the 7th and 8th grade curriculum, as well as secondary data such as public and/or school documents.
- Systematic lesson observation of selected groups, school routine and internal and external community interaction over two weeks in 2016, using field notebooks.
- Conducting semi-structured interviews with participants involved in the pedagogical process (Board 1). Participants were interviewed individually and did not follow the pedagogical program or assumptions of the researcher.

Board 1: Questions from semi-structured interviews conducted with research participants

<i>Position held at school</i>	<i>Interview questions</i>
Teachers	1-How have you been working with Environmental Education in the classroom? 2- How do you integrate Environmental Education into the syllabus of the grade you teach? Give an example by specifying content where you integrate with Environmental Education? 3- What is the relationship you make between the content taught and the student's context? 4- In your opinion, what is the importance of Environmental Education in the pedagogical process for the students' integral formation? 5- Have you ever carried out work that demonstrates an environmental concern regarding waste, energy, water and biodiversity at school? 6- Do you promote field activities in green areas or natural environments? 7- In your opinion, what role will Environmental Education play in transforming the individual's relationships with him/herself, society and the environment?

Education specialists (Tutor)	1-How do you develop your work with Environmental Education and what relationship do you establish with the context of the student and the community? 2-What is the importance of Environmental Education in the pedagogical process for the integral formation of the student? 3-How can your work contribute to the development of Environmental Education in the pedagogical process as a cross-curricular theme? 4-In your opinion, what implications will the work with Environmental Education at school bring to the relationship between individuals, society and the environment?
Students	1-Do you participate in activities related to the environment at school? 2-Do you have class discussions about what is happening on the planet and in your community regarding the environment? 3-How do you think people can collaborate to improve and/or conserve the environment in which they live? And what have you been doing? 4-Do you understand that sustainability in your community is important? 5-In your opinion, how can human beings improve their relationship with the environment?
Staff	1-Does the school care about cleanliness? 2-What is the current situation of the infrastructure and public property concerning: broken faucets, moisture infiltration, mold, uncovered wires, leaks, graffiti, etc.? 3-In your opinion, what is the importance of the relationship between humans and the environment?

Source: elaborated by the authors (2017)

Based on reading the interviews of the 38 participants, the ideas considered central and that met the objective of the research were selected.

Afterward, considering the dialogue extracted from the data regarding the investigative focus and the principles of the Steiner educational conception, five thematic cores were developed that guided the data systematization, such as:

A) a vision of the world, human beings and education - refers to the ways of perceiving and conceiving the world based on experiences and the different social institutions that influence this vision on a daily basis, as well as the different ways that people interact and give meaning to these experiences and spaces.

B) vision of EE and greening education– this is related to understanding and approaching the socio-environmental theme and EE in the everyday life of the school.

C) interdisciplinarity and complexity of disciplines – this refers to the dialogues established with the different areas of knowledge and dimensions of the curricular contents addressed, opposing a fragmentation of knowledge in the teaching and learning process.

D) school-community relationship – this deals with the relationships established between the school community and the community in which the school is inserted.

E) Sustainable Management and Buildings – this is related to the planning, organization and development of sustainable actions, as well as coefficient buildings in the school institution.

2.4. Data Analysis

For the systematized data analysis from the thematic core mentioned previously, we dialogued with Steiner educational assumptions (Lanz, 2016; Steiner, 2012a; Steiner, 2012b) and their relationship with nature during the educational process that was developed and observed in the analyzed Waldorf school.

3. Results

3.1. Vision of the world, human beings and education

When analyzing the school's PPP regarding the understandings and relationships established by human beings in the world, one can see the emphasis on the contribution of the educational process to action in society, according to which:

[...] the key lies in achieving live and global thinking that can act with independence and capacity of initiative, with competence for adequate decision-making and autonomous action based on social responsibility. Considering this, the environmental and multicultural aspect of education should be emphasized (EWRDS, 2016, p.12).

Regarding the approach to the curriculum contents developed in these grades at school, the teachers and tutors who were interviewed indicate the need to articulate the contents with the context in which the students are inserted from a multidimensional perspective offered by an integral formation that involves the cultural, artistic, environmental, social and aesthetic aspects (Board 2).

Board 2: Interview excerpts with research participants

<i>Role in school setting</i>	<i>Interview excerpt</i>
Teacher A	The multidimensional aspects of the students' reality must be articulated to the contents dealt with in the classroom.
Teacher B	Considering a holistic way of seeing man, the world and education, the integral formation of human beings needs to articulate and interrelate themes such as the individual, nature and society.
Teacher C	Schools in the contemporaneity of troubled relations between social classes need to understand and commit to the multicultural and environmental dimensions of their students (as) in favor of transformations in the context.
Education specialist (Tutor)	Learning needs to be permeated by its multidimensional and humanizing elements, culture, art and aesthetics, articulated to a commitment to social transformation for the integral formation of human beings.

Source: elaborated by the authors (2017)

3.2. Vision on EE and Greening Education

The PPP presents the school's educational proposal, which aims to consider training that enables the school community to be involved and help understand the relationships established in and with nature. Thus, according to the document, the aim is to “lead the participants of the school community to the vision of human evolution, in its interrelationship with nature and other human beings, aiming at the awareness of their being as a transforming subject of the world and creative” (EWRDS, 2016, p.18).

Regarding the curriculum content approach and its relations with the understanding and approach of socio-environmental themes and EE, according to the teachers, these aspects have been developed since kindergarten and aim to establish different harmonious and transformational relationships with nature. For the school tutor, the development of affectivity in daily activities represents an important way of relating to nature. When interviewing the students, it was observed that they understand human beings as part of nature (Board 3).

Board 3: Interview excerpts with research participants

<i>Role in school setting</i>	<i>Interview excerpt</i>
Teacher A	Based on a human-nature connection process, we aim to transform the human-nature relationship, as they constitute a single and inseparable whole together.
Teacher B	We cultivate our relationship with nature in a loving way on a daily basis through gardening, food, astronomy, trails, permaculture, artistic manifestations, local cultural and social traditions.
Education specialist (Tutor)	The human-nature relationship, within educational practice, is considered in its divine, universal and cosmic essence and is experienced among others through the aesthetic and artistic element, as well as in relation to the predominant socioeconomic development model in our society.

Student A	We are all part of a whole, nature, human beings and the universe.
Student B	Nature is everything that exists naturally on the planet, including human beings.

Source: elaborated by the authors (2017)

3.3. Principles of interdisciplinarity and complexity

The PPP presents the need to work with the contents according to the anthropological needs of the students in a transdisciplinary way, based on rhythms and times that make the educational practice dynamic, procedural, giving it vitality. This movement stimulates and motivates the student to develop schoolwork, aiming at the quality of knowledge conceived in multidimensional aspects, as can be seen in the following excerpt:

The selection of contents according to the evolutionary needs of the students and their transdisciplinary treatment in the time and rhythm considered as ideal gives meaning and vital meaning to the educational task. This naturally increases the student's interest in his/her schoolwork, optimizes the quality of knowledge, increases involvement, favors the appearance of elements of satisfaction, such as pleasure in learning, enjoyment of work and positive attitudes towards learning in general (EWRDS, 2016, p. 22).

According to the school's teachers and tutor, the approach to curriculum content should be developed from an interdisciplinary and multidisciplinary perspective, also involving aspects of the student's social and cultural context (Board 4).

Board 4: Interview excerpts with research participants

<i>Role in school setting</i>	<i>Interview excerpt</i>
Teacher A	From the socio-historical-cultural reality of the students and their surroundings, the various dimensions are brought in an inter-transdisciplinary way within the themes to be worked on.
Teacher B	Reflections, experiences, developments and construction of concepts in a multidisciplinary, aesthetic and artistic way are always present in educational practice.
Education specialist (Tutor)	The disciplines are dealt with in a multidimensional and concomitant scope that enables articulations and interrelations with each other within a single theme.

Source: elaborated by the authors (2017)

3.4. Dynamics of the School-Community relationship

In the school's PPP, the articulation between the school and the local community is part of the institution's principles, mainly in view of self-management practices and encouraging community interaction. According to the document, "the vision of human beings and society nurtures everything that is done in Waldorf schools around the world, both in pedagogical action and with regard to their institutional organization of collegiate self-management and socio-community interaction" (EWRDS, 2016, p.25).

The school's teachers and tutor indicate that the participation and cooperation of the local community in school activities contribute to the maintenance and construction of the school, as well as to the strengthening of relations between the school community, families and their surroundings (Board 5).

Board 5: Interview excerpts with research participants

<i>Role in school setting</i>	<i>Interview excerpt</i>
Teacher A	The relationships of belonging and responsibility for the community itself result in the good of the school.
Teacher B	Through the collective construction of the school, there is also that of the school community.

Education specialist (Tutor)	Close social and affective bond among teacher-student-family.
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Source: elaborated by the authors (2017)

3.5. Sustainable buildings and management

The school is located in an area of the Atlantic Forest and its physical facilities were planned and built to take advantage of natural lighting and ventilation. It also has open and outdoor areas used for activities developed with students, including the forest that surrounds the school.

It was observed that the school has a small garden/vegetable garden based on the principles of permaculture, in which herbs and vegetables are grown for use in the school (Gardening and Consumption school discipline). Composting and recycling practices are also carried out, as well as small craft productions (Woodwork course) that are sold at events with the local community. The maintenance, cleaning and care of all school spaces rely on the contribution of all school members (Board 6).

Board 6: Interview excerpts with research participants

<i>Role in school setting</i>	<i>Interview excerpt</i>
Teacher A	Based on sustainable management of natural resources, recycling, selective collection, composting, gardening, permanent permaculture and current needs and considered by the socioeconomic conditions of the school community and extra in an interdisciplinary way.
Teacher B	We provide light, natural ventilation and rich trees with an abundant presence of the Atlantic Forest in the surroundings, in a harmonious relationship between human beings and nature.
Education specialist (Tutor)	Based on social sustainability with the coexistence and cooperation of different social classes with each other, we adopt a shared collective management practice without hierarchies.
Employee A	We and our children belong to this school space, so we take care of what is ours.
Employee B	The school space is ours and that of the local community, so we make the most of it to the full extent, zealously and taking loving responsibility.

Source: elaborated by the authors (2017)

3.6. Systematic lesson observation

The observed aspects are those arising from the school's daily life for students in these grades, which in the case of a Waldorf School refer to:

- Welcoming all students in the school's outdoor patio for an introductory cultural moment.
- Entrance to the classroom (each room is a small, isolated building) with a moment of preparation for learning artistically and freely: poetry, music, meditation.
- Development of the main class, according to the chosen theme, articulating the season of the year and its characteristics, in an inter-transdisciplinary way and always in the theoretical-practical and artistic perspectives.
- Outdoor classes, in the garden, carpentry, observation and painting nature and its phenomena, reciting poetry in the forest of the school's ecological reserve and rehearsing the annual theatrical presentation, in the case of the 8th grade, chosen from a work of literature by the students.
- Encouraging healthy, natural and fresh food using local products in class time. There is a kitchen to do this.
- A descriptive form of learning assessment that does not encourage competition and promotes cooperation.

Rhythmic teaching articulating seasons of the year, themes, methodology and didactics, rituals and traditions as well as the form of descriptive evaluation, characteristic of Waldorf schools, demonstrate the constant connection and articulation of theoretical, practical and

artistic aspects to the environmental theme, which is an integral part of the learning process in all its dimensions.

4. Discussion

The observed and analyzed results corroborate the statement that the Steiner educational conception, in the way it is developed in the investigated context, considers an understanding of the world, of the human being and of multidimensional education, emphasizing cooperative and community work in the school management and its environmental context.

In addition, we observed that the educational conception of the proposed Waldorf school investigated is based on the following principles:

- valuing inter-trans-disciplinary work.
- equal importance given to curriculum disciplines for cognitive, biological-technological and practical-artistic development.
- encouraging the development of new knowledge on current issues and innovative perspectives, that is, a living curriculum (theory transformed into practice), which encourages spontaneous learning, an investigative spirit, creative and participatory activity in the formation of society.
- the teacher's commitment to the student, his/her family, the school and local community.
- the rhythmic sequence recognition-comprehension-mastery of the content (to experience, observe, experience, remember, describe, characterize, annotate, process, analyze, abstract and generalize, developing theories).
- participative and cooperative management, without hierarchies in school construction.
- the presence of the aesthetic and artistic element throughout the educational practice, as a means of enabling a loving bond between knowledge and the student.
- eco-efficient buildings and sustainable management of educational spaces and actions.

A human being is understood as an integrated, organized and indivisible system, body/mind, without any separation between thinking, feeling and willing. Therefore, this understanding, based on the broad and complex totality of human reality, nature and society are interconnected and interdependent.

This multidimensionality is also present in the view on EE and school environment addressed and developed in the investigative context, where students experience the uniqueness of the human being's relationship with nature. This Steiner educational principle is based on the reflections carried out by Steiner based on the works of Johann Wolfgang Goethe (1749-1832), as the author states:

Just imagine how Goethe, like a fragment of culture placed in the midst of Nature, from early childhood opposed the educational principle around him. He could never separate the human being from the environment. He always considered it in its connection with Nature, feeling himself, as a human, one with her (Steiner, 2016, p.87).

The Steiner cosmivision enables Waldorf students to learn about the laws of life and the universe, forming concepts through experiences conducted by the natural processes of the environment in relation to human beings and their transforming possibilities.

The principles of interdisciplinarity and complexity are fundamental elements of the Waldorf curriculum. They are presented at a suggestive and guiding level for the teacher who defines the contents and the level of depth based on several factors, individual and collective of the class (Richter, 2002).

Waldorf schools characterized by a multidisciplinary methodology in terms of the content, relate them to the student's age, within a pedagogically prepared space to encourage learning, creativity and personality formation, through cognitive knowledge in equality of importance with biological-technological and practical artistic matters.

As for Steiner's Pedagogical Practice, a systemic and transdisciplinary approach is observed in its development, which operates in interdisciplinary dialogues in thought and action schemes.

The articulation between the school and the local community is present in the curriculum and in the pedagogical practices developed by the students to build a cooperative environment. School-community integration occurs formally and informally, based on educational, social, cultural and environmental aspects that aim at social and individual transformation.

Regarding planning practices, organization and development of sustainable actions and sustainable buildings, there is no sense in having aesthetic care between teachers and students in the idealization and use of external spaces and green/forest areas for pedagogical purposes, in an interdisciplinary way, according to the Waldorf methodology itself. Interdisciplinary projects are carried out to have contact with nature and develop management actions, involving the school community. Everyday educational practices are developed to avoid waste and encourage selective collection actions. There is a direct and indirect community commitment to ecological and sustainability values.

We believe that the Waldorf educational principles contribute significantly to rethinking the human relationship with nature, in a critical way, explaining the possible ways of facing the hegemonic modes of production in our society. We understand that “if education alone does not transform society, neither does society change without it” (Freire, 2021, p.67). Furthermore, the school, as a favorable space for creation and transformation, can also be the stage for an educational process that makes it possible to educate children and adolescents committed to fairer socio-environmental relations.

5. Conclusions

The main aim of this study was to understand the greening education process of a Brazilian Waldorf school in dialogue with the Steiner principles and with the concepts and practices linked to the socio-environmental issue. Data analysis was carried out based on a thematic core, such as the vision of the world, human beings and education, the vision of EE and greening education, the interdisciplinarity and complexity of disciplines, the school-community relationship and management, as well as sustainable buildings.

Generally, we considered that teaching and learning process is developed from a humanizing perspective, which considers the student individually: his/her potential, talents, abilities and qualities that contribute to his/her integral formation. To this end, it aims to develop further than the curriculum content, continuous thought, feeling and acting that corroborate the connection of the human being, with him/herself, with the other, with nature, with the world, in a loving way, observing the rhythms of nature of which the human being is a part.

We conclude that the present study of the case of the aforementioned school is an important precedent that shows the need for greater depth in future investigations related to greening education in Waldorf schools in general. When considering the expansion of Waldorf Education, “what will Waldorf/Steiner education look like in another century?” (Paull; Hennig, 2020). Or even, what challenges and possibilities have arisen to reflect upon Waldorf pedagogy from the different social, cultural and economic contexts and the problems arising from relations of exploitation and social and environmental degradation?

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