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Sustainable development goals and continuing teacher training: towards an environmental agenda in schools

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ABSTRACT

The 2030 Agenda is an essential topic for the training of students, as they must be prepared for the new challenges that the global and local situation imposes on them. It is in this conception that this study aims to reflect on the perspective of inserting environmental agendas in schools based on a training action with teachers in light of the Sustainable Development Goals. The study is characterized as field research, with a qualitative approach, and was developed with the participation of 65 teachers linked to the Department of Education of the municipality of Carnaúba dos Dantas, in the state of Rio Grande do Norte-RN. We created a training workshop on the 2030 Agenda and its objectives so that the professionals involved were invited to discuss and propose actions to create an agenda, in a participatory way, for the municipality where they work. With the data obtained in the process, it was possible to see that the proposed models for carrying out the training were purposeful and integrative; that there are gaps, especially with regard to Education for Sustainability in teaching practice, and that the possibility of extrapolating traditional practices in schools, when it comes to sustainability, is real, as teachers have drawn up concrete proposals (an agenda) for critical and participatory way. We emphasize that this movement of formation, construction and execution of the agenda can bring very fruitful results, as it is a process built from the inside out by agents who thought about the problem and the demands to solve them.

KEYWORDS: Education for sustainability; Agenda 2030. Sustainable Development Objectives; Teacher training.



Objetivos de desenvolvimento sustentável e formação continuada de professores: por uma agenda ambiental nas escolas

Resumo

A Agenda 2030 é uma temática imprescindível para a formação dos alunos, já que estes devem estar preparados para os novos desafios que a conjuntura global e local os impõe. É nessa concepção que este estudo objetiva refletir sobre a perspectiva de inserção de agendas ambientais nas escolas a partir de uma ação formativa com professores à luz dos Objetivos de Desenvolvimento Sustentável. O estudo é caracterizado como uma pesquisa de campo, com abordagem qualitativa, e foi desenvolvido com a participação de 65 docentes ligados à Secretaria de Educação do município de Carnaúba dos Dantas, no estado do Rio Grande do Norte-RN. Elaboramos uma oficina formativa sobre a Agenda 2030 e seus objetivos a fim de que os profissionais envolvidos fossem convidados a discutir e propor ações para a criação de uma agenda, de modo participativo, para o município onde trabalham. Com os dados obtidos no processo, foi possível perceber que os moldes propostos para a execução da formação foram propositivos e integrativos; que existem lacunas, principalmente no que diz respeito à Educação para a Sustentabilidade na prática docente, e que a possibilidade de extrapolação das práticas tradicionais nas escolas, quando se trata de sustentabilidade, é real, pois os docentes elaboraram propostas concretas (uma agenda) de forma crítica e participativa. Salientamos que este movimento de formação, construção e execução da agenda pode trazer resultados muito frutíferos, visto tratar-se de um processo construído de dentro para fora por agentes que pensaram no problema e nas demandas para resolvê-los.

PALAVRAS-CHAVE: Educação para a Sustentabilidade; Agenda 2030. Objetivos de Desenvolvimento Sustentável; Formação de professores.



INTRODUCTION

Degree courses aim to train professionals who have a range of skills and abilities to teach content related to each discipline, as well as cross-cutting themes of the school curriculum and critically discuss situations in different contexts, local or global. Due to several factors, these objectives are not always fully met and, therefore, teacher training becomes one of the main problems in Brazilian education (Alvarado-Prada et al., 2010).

Teacher training, in general context, occurs in a continuous process, that is, it encompasses school life, initial training and aspects of the world of work, processes in which the teacher must behave as a researcher of his own pedagogical practice (Buratti et al., 2021). Jacobi (2013) warns that one of the major challenges in teacher training is the development of collective dynamics, which are able to provide an understanding of the nature and problems that surround it as something common to all. This implies showing to individuals that cooperation and the construction of collective knowledge will help solve problems or conflicts related to the degradation of natural resources, for example, which in turn is not an individual but a global issue.

Almeida, Araújo and Silva (2022) also point out the importance of knowing the methodological strategies that teachers use in their classes to stimulate reflection, critical learning and contextualization of the subjects worked with their students. Add to this that, in moments of continuing education, it is possible to exchange knowledge, experiences and improvement of pedagogical practices that were and are being experienced by participating teachers. With this, it is possible to refine the pedagogical practice of those involved in a collective and contextualized way, overcoming possible gaps that may exist.

It is in the perspective of filling the gaps left by the initial training that national and international guidelines are launched, emphasizing the continuing education of teachers, with regard to training, updating and professional improvement (Dias & Ferreira, 2018). Regardless of the nomenclature and the molds given, this type of training allows teachers to acquire, complement or revise their knowledge, reflecting positively on their pedagogical practice and broadening their horizons and students on local and global topics.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has stood out for raising reflections and guiding the training and training of teachers in the perspective of education for global citizenship covering several aspects: actions, partnerships, dialogues and cooperation, through formal and non-formal education (Unesco, 2015). In addition, this type of education has several axes of action, in which one can highlight Education for Sustainability, allowing students to develop the knowledge, skills and values they need to ensure a fair and sustainable world.

Education for Sustainability, in the school environment, allows teachers and students to create conditions conducive to democracy, critical reflection on things, redefinition of concepts and socio-environmental attitudes and essentially, rethink the lifestyles and consumption that the human being has been adopting in front of an increasingly interdependent and globalized world (Silva & Araújo, 2023).



In Brazil, some initiatives have been built in recent years, in order to guide teachers in conducting socio-environmental issues, such as the inclusion of sustainability in official documents of educational institutions, or even the production of materials that assist teachers in contextualizing issues related to sustainability in their classes, especially the material training COM-VIDA, Commission on Environment and Quality of Life in School: building Agenda 21 in school (Brasil, 2007). The title had great prominence and dissemination in Brazilian public schools. However, it cannot be said that its use contemplated its objectives.

It is important that the implementation of tools, such as agendas, bring discussions of themes that refer to the context of students' lives and that their elaboration is participatory and horizontal. The new global demands require that agendas are also conceived within a global vision, but from a local resolution perspective. It is essential that it be in line with the world agendas, such as the 2030 Agenda, which has 17 Sustainable Development Goals (SDGs) and was developed with the help of several signatory countries of the United Nations (UN), including Brazil.

Cruz and Zanon (2010) reaffirm that the actions arising from the agenda should not be seen as activities to be carried out to solve problems in the short term, but the instrument should be used as a proposal for promotion, reflections and practices to think about a sustainable society. Pimentel (2019) corroborates by highlighting that the 2030 Agenda considers the interconnection of three essential elements, namely: the universality of objectives and goals; the integration of social, economic and environmental policies, and the integrated cooperation between individuals.

These principles, when inserted in teacher training, can generate a network of dialogue in which reflections and conjectures add positively to the resolution of social and environmental problems in a collective way. Likewise, teachers with training based on understanding and awareness of the problems that affect humanity can feel empowered to awaken discussions and reflections in their students, stimulating the participation of all in solving global and local problems.

From this perspective, Teixeira and Torales (2014) ask: how are the undergraduate courses preparing future teachers for the institutionalization of these issues? This questioning stems from the essence of this type of education, because training teachers in a sustainable perspective permeates technical-scientific knowledge, since this type of education is, first of all, based on values that refer to solidarity and social justice. In addition to this question, we can add: how are teachers themselves seeking ways to insert, in a contextualized and continuous way, regardless of discipline and curriculum, topics related to sustainability in their classes? Is the concern valid?

Given the scenario of teacher training in Brazil, the new planetary demands from the perspective of Education for Sustainability and the challenge to implement the SDGs, this research aimed to reflect on the perspective of insertion of environmental agendas in schools from a formative action with teachers in the light of the Sustainable Development Goals.



METHODOLOGICAL WAY

GENERAL ASPECTS OF THE RESEARCH

The study is characterized as a field research, with a qualitative approach, and was developed with the participation of 65 teachers linked to the Education Department of the municipality of Carnaúba dos Dantas, in the state of Rio Grande do Norte-RN.

According to Gerhardt and Silveira (2009), the involvement and identification of the researcher with the people investigated, as it happened in the present research, since researchers are also teachers who seek to insert aspects of Education for Sustainability and 2030 Agenda in their classes. In corroboration, Marconi and Lakatos (2003) consider that the field research is used in order to extract information and/or knowledge about a problem that you want to solve, or even discover new phenomena or relationships between them.

Regarding the qualitative aspect of the study, it is based on Fonseca (2002), when it states that this type of research allows an approach that cares about the knowledge of reality that cannot be quantified, that is, perceptions, intentions, reflections, thoughts, among others.

As an ethical aspect adopted, we conclude that the study is part of a broader research, which was submitted and approved by the Ethics Council of the Federal University of Rio Grande do Norte (UFRN), through the Brazil Platform, obtaining nº 5.327.250 and CAAE: 54129421.2.0000.5537 in accordance with the Resolution of the National Health Council nº 466/2012. In addition, before the proposed training, participants signed a Free and Informed Consent Form (FICF), agreeing to participate in this.

CONTEXT

The training was carried out in the municipality of Carnaúba dos Dantas, a city located in the interior of the state of Rio Grande do Norte (RN), in a semi-arid area, which gives it striking socio-environmental problems, especially those related to water scarcity.

The training with teachers occurred within a context of institutional partnership between the Federal University of Rio Grande do Norte (UFRN) and the Department of Education of Carnaúba dos Dantas/RN. To carry out the training, the secretariat mobilized teachers, presenting the moment as a proposal for continuing education in Education for Sustainability, with emphasis on the ODSs.

The need for training was made explicit when, in a previous moment, when developing a research with part of the teachers of public schools in the city, it was clear that an expressive part of these teachers did not even know the elements related to the 2030 Agenda, and neither knew the concept of Education for Sustainability. It was also observed that they had difficulty conceiving the



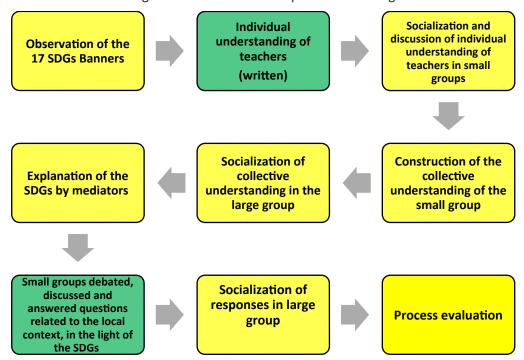
environmental issue more broadly and thinking about more comprehensive sustainability policies and linked to education in and for schools in the region.

MOMENTS OF THE WORKSHOP

The training was divided into moments of observation, discussion, reflection and information collection, as shown in the flowchart below (Figure 01).

Figure 01

Flowchart showing the moments of development of training.



* The evaluation of the process served to the understanding of researchers, as proponents of training, about what could be improved and/or appropriate in case of application of the workshop with other classes and other municipalities. Therefore, data from this phase were not analyzed in this study.

Source: own authorship (2023).

At first, teachers were invited to explore an exhibition, previously assembled, with 17 banners (1.60 height x 0.50 wide) on the 17 SDGs. This was done individually and without any previous explanation on the themes covered in the banners. With this, participants had to create their own conception of the content of the banners, writing about it.

Soon after, they were invited to divide into small groups and socialize, there, their individual conceptions, thus creating a response per group on the content of the 17 banners. The responses of each group were socialized and discussed with the large group (all participants and mediators). Then, the workshop mediators explained, in a quick and visual presentation, the SDGs, one by one: their origin, their dimensions and examples related to each of them.

After these moments, the teachers were invited to think about a sustainability agenda for the municipal schools in the light of the SDGs,



considering the socio-environmental and economic context of their region. For this, it was requested that they return to the small groups at the beginning of the workshop and discuss, collectively, about the aspects of their municipality, responding to a standardized script that aimed, at the end, the survey of elements that would integrate the agenda (Chart 01).

Chart 01

Guiding questions for agenda preparation.

List the problems of the semi-arid region/Carnaúba dos Dantas;

From the problems listed, think of three actions to be carried out at school (relating to the SDGs);

Identify whether actions should occur in the short, medium or long term.

Source: Own authorship (2023).

At the last moment, the participants responded to an evaluation of the training, highlighting what they liked, what could be improved in the organization and in carrying out the training, if the training left them with questions and concerns and still write what they wanted as other comments.

DATA COLLECTION AND ANALYSIS

As described in the flowchart presented in Figure 1, the data collection for this study took place in two important moments: (1) creation of a conception of each participating teacher on the content of the banners and (2) issues related to the local context in the light of the SDGs, with consequent survey of problems and the proposition of actions that help to solve them.

Regarding the data of the first moment, these were quantified in percentage, detailing the percentile of teachers who were able to visualize the presence and context of the SDGs in the banners presented, or other perceptions considered relevant to the study, fact that demonstrates already possess or not knowledge about the subject. We highlight, however, that, even presenting the data in percentage values, the interpretation was performed from the speeches emanated from the participants, thus maintaining the qualitative nature of the study.

For the second moment of data collection, we used the Content Analysis Technique, Bardin (2011). Using the technique, we go through the following steps: (I) the pre-analysis, which proceeds to the organization phase, where the answers of the teachers were carefully read and transcribed to the Microsoft Word 2010 text editor; (II) the exploration of the material, during which the codification was performed, exploring the answers in order to identify the words, taking into account their most important characteristics, preparing them for the elaboration of categories, and finally (III) the treatment of results through categorization and interpretation of information.



RESULTS AND DISCUSSION

The research participants make up a diverse audience in age, gender and training, being expected for a moment of training in Education for Sustainability, since this has a multifaceted and interdisciplinary character. This fact is the same alignment at UNESCO, stating that "no discipline can claim Education for Sustainability on its own, but all disciplines can contribute" (Unesco, 2015), since sustainability is complex and covers several dimensions: social, environmental, economic and variants of these.

ON THE CONCEPTION OF TEACHERS REGARDING THE CONTENT OF BANNERS

Regarding the exploitation of banners and the impressions they had of this, no teacher made direct reference to the SDGs. However, 3% of the total participants stated that the banners dealt with the Millennium Development Goals (MDGs), an agenda prior to the SDGs, which lasted 15 years (2000 and 2015) and another 25% referred in their responses to sustainability, environment, sustainable development, among others, demonstrating coherence with the real content presented by the banners.

Of the discourses that demonstrate certain knowledge on the part of the teacher and coherence with the themes and concepts related to the SDGs, we highlight the speech of a geography teacher: "We can say that banners deal with socially inclusive and environmentally sustainable development". Already a pedagogue reported that "the banners are dealing with the importance of sustainable development and this is able to minimize hunger, poverty, and generate jobs with dignity, among others".

A small portion of the teachers (6%) wrote sentences relating the banners with education, in the perspective of being themes that should be debated in the classroom, but did not score how to do or as a type of policy or education more structuring as Education for Sustainability.

Some of the teachers (9%) said that the content of the banners represented "a dream" and others, within this fraction, added, in a negative tone, that these dreams were unattainable. In fact, the goals of the SDGs are audacious and many authors treat them as utopia, as well as Education for Sustainability, but they point out that this way of perceiving the world is "a utopian notion, which marks a direction on which to build" comparing with ideas also necessary and, for many, utopian, such as democracy and justice (Lobera, 2008).

We infer that the little knowledge of the participants about the content of the SDGs and Agenda 2030 reinforces the need for actions and partnerships as proposed by the training described here. Nunes (2024) corroborates by stating that the integration of sustainability into educational practices, essentially in school environments, provides opportunities for partnerships with the local community, non-governmental organizations and companies committed to sustainable practices, the partnership between the teachers of the municipality, the researchers of this study and the Municipal Education Department of the place where the research agents are inserted.



The fact that teachers are open to the participation of continuing education on a topic hitherto little known demonstrates the commitment of these subjects to education and training also of their students, in addition to their own training. Vilela (2011) reinforces that by strengthening educators' understanding of a topic linked to sustainability and the environment, we also strengthen commitment and execution of sustainable behaviors for students, creating a culture of environmental responsibility in the school environment, which can extrapolate the walls of the school and reach the community in which they are inserted.

ON RAISING PROBLEMS AND PROPOSING ACTIONS THAT HELP SOLVE THEM

Exhausted the discussion about the content of the banners and having the mediators explained the SDGs in their various aspects, the teachers, grouped by school, began the activity related to the practice of building guiding elements of an agenda for schools in Carnaúba dos Dantas-RN, based on the script established in the methodology. We emphasize that the discussion on the environmental agenda finalized the presentation of the SDGs, promoting clarification on this resource for schools, giving basis to the next step of training.

The four groups formed received a script to be filled consensually. Therefore, they should think of typical problems of their school reality, linked to some or some SDGs and indicate the actions that would be implemented to achieve a goal of solving the problem.

In a short time, teachers were able to reflect on the problems of the municipality, relate them to the SDGs and propose tangible actions for their mitigation. The listed problems extrapolated the barrier of ecologism and/or environmentalism and entered into issues related to the social and economic dimensions, attesting that teachers were able to add the concept of Education for Sustainability in the perspective of something really complex. All groups followed this pattern, and one of the groups also pointed out the relationship of each problem to each of the dimensions of sustainability (environmental, social and economic).

Regarding the relationship between the SDGs and the problems highlighted (Chart 02), the one that most repeated was SDG 3 (Health and Well-Being). For Vladimirova and Blanc (2016), This reflects a long tradition of emphasizing the importance of education as a catalyst for other areas of development, such as health.

Chart 02
Group responses to the agenda building roadmap.

	ISSUES LISTED	SDGs	ACTIONS
Group 01	Depression in adolescence, excessive consumption of electricity in school and lack of employment opportunity.		
			problem, and refer young people with possible psychological disorders to



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	ISSUES LISTED	SDGs	ACTIONS
		07,09 and 12	specialized professionals. Work on faculty and student awareness about the importance of saving energy and improving the school's
		04, 08	power distribution network. Implementation of a waste
Group 02	Lack of water, deforestation, garbage, animal hunting, pollution, traffic, loose	and 10 03, 04, 06, 07 and 12	recycling cooperative. Awareness campaign on the proper and inadequate use of water.
	animals on the streets,	3, 8, 9,	Promotion of workshops for
	prostitution, drugs, violence,	11, 12,	reuse and transformation of
	lack of security, consumerism and poor	15 and 17	waste.
	nutrition (excessive	2, 3, 4,	Building a vegetable garden
	consumption of industrialized products and	8, 9, 11, 12	at school to introduce healthy foods into school
	pesticides).	and 17	meals, as well as making children and families aware of healthy eating.
Group	Birth control of cats, garbage	3, 11,	Partnership with the
03	and drugs.	15, and	Department of Health and Environment to mobilize
		17.	awareness.
		3, 11,	Work the selective
		12, 13 and 15	collection, making the realization at home, school and city.
		1, 2, 3,	Informative lectures about
		10, 11,	its impact on the human
		16 and	being and the environment
_		17	in which he lives.
Group 04	Lack of employment (ECONOMIC). Family	1, 2, 3 e 4	Rescue of the Family in School Program.
	disruption, fragility of some institutions, drugs (SOCIAL). Super population of cats and	3, 15 and 17	Preparation of a booklet with specific guidelines for loose animals.
	dogs in the Forest Garden,	3, 4, 8,	Strengthening and
	lack of afforestation in the	16 and	expanding PROERD and
	city and inadequacy of waste (ENVIRONMENTAL).	17	offering courses and professional workshops.

Source: Own authorship (2023).

We highlight, initially, that, of the 17 SDGs established by the 2030 Agenda, only two were not mentioned in the proposed agenda prepared by teachers: SDG 5 (gender equality) and SDG 14 (life on water). We understand that the latter is



due to the fact that it is the "Life in the Oceans", since the study area is in the Brazilian semiarid. SDG 5, which deals with gender equality, since the beginning of the discussions, caused strangeness, because teachers could not see the relationship that this has with Education for Sustainability. This allowed a discussion about some nuances of these relationships, such as the study by UNESCO (2013) that highlights the fact that women in Latin America, especially those from rural areas, have fewer years of formal education than men and that, without adequate education, there is no way sustainable development can happen.

Bringing the discussion of gender to the local level, we can conjecture that there is no discussion of the theme "gender equality" in a formal way by these teachers. For Cardona (2015), for example, it is essential to approach gender equality from the perspective of education for citizenship (which relates to Education for Sustainability, or would be until the very end of it) recommending teachers not to work with stereotypes, thus not limiting the development of students of both sexes.

Some SDGs were cited only once, such as SDG 13 (action against global climate change) and SDG 6 (Drinking water and Sanitation). We hoped that the latter had greater insertion in the citations, because its main objective is "Ensure the availability and sustainable management of water and sanitation for all and all" (UN, 2015). This theme has a notorious connection with the municipality, which is in an area of environmental vulnerability, resulting mainly from prolonged water crises.

Faced with the problems and resolution actions listed, it was possible to reach two main categories with the analysis process: (1) problematization of themes related to the health and physical and mental well-being of adolescents and (2) issues for a more sustainable future. These categories demonstrate that teachers were able to list topics not so obvious when it comes to sustainability and relate them to the SDGs and school practice, such as "depression in adolescence" (linked to SDG 3 - Health and well-being) and need attention and care from the entire school community.

Nunes (2023) states that incorporating the SDGs in schools is a significant step towards achieving an education more aligned with contemporary local and global challenges, as the themes, concepts and alerts provided by the 2030 Agenda, for example, cover key issues, as the eradication of poverty, gender equality, climate action and sustainability, themes perceived by teachers participating in the training. This data can be seen, therefore, as a possibility that the themes and concerns raised and debated during training, reach schools, the classroom and adolescents in training.

As reported in the workshop, teachers noted that physical and mental health and well-being problems, such as depression, drugs and violence, increasingly encompass a greater number of students, which is corroborated by data from the World Health Organization's report on health problems, which indicates that "depression is the predominant cause of illness among adolescents" (WHO, 2014). In addition to being a serious and public health problem, the problem affects the quality of life of young people, and may compromise their school career.



We emphasize, therefore, that all SDGs are, to a large extent, related to education and can be worked in the educational field, regardless of the context. In the meantime, for Vladimirova (2015), there is still a weak link between education and SDGs 12 (responsible consumption and production), 13 (action against global climate change), 14 (life on water) and 15 (terrestrial life) even in official UN documents, which shows a gap to be explored in the next trainings directed to teachers.

EDUCATION FOR SUSTAINABILITY AND TRAINING WORKSHOP: WEAVING REFLECTIONS

To work in a perspective of Education for Sustainability, it is necessary that teachers have an enlarged, complex, interdisciplinary world view, among many other characteristics, but when faced with the daily school life, often, they are not prepared to approach the content in this perspective. This refers to the need that initial training should already be concerned with these discussions, which can be deepened in continuing education courses. For Freire (2007), continuing education should be the centre of professional development and the change or innovation of curricular practices.

Franciscão and Borouchovitch (2023) reinforce the need to highlight the relevance of learning strategies for future teachers, since there is a demand for overcoming obstacles inherent in the initial training itself and also with regard to teaching them to future students. This fact, according to the authors, lies in the knowledge of self-regulation of learning and the use of learning strategies that are valid for the lives of teachers and, consequently, of students.

Other studies, such as those of Cruz and Maia (2015) and Viana and Oliveira (2006), emphasize that, given the gaps left in undergraduate courses, or even in the face of new educational demands, it is necessary that teachers go through processes of continuing education, since these professionals have the potential to be agents of transformation. From the perspective of Education for Sustainability, this transformation takes place in the teacher's ability to understand the core of this type of education and guide their students so that they can develop the skills necessary to make decisions aimed at sustainability at all levels, from the simplest to the most complex. It is in this sense that Coró et al. (2014) advocates that the principles of Sustainability Education be introduced in early childhood education.

Training on the SDGs and Sustainability Education was based on the importance of the theme, the urgency of the significant presence of this vision in schools and the training gaps of teachers. The training gaps are already the subject of numerous studies and it has been noted that teachers in training are not aware or know little about the concept of sustainability in education bias (Silva et al., 2015; Araújo & Pedrosa, 2014).

The moment of training discussed here proved to be very rich and, when analyzing the immediate result of the propositions for an environmental agenda, we can conclude that the teachers, in general, were able to add new information, understand the concept of Education for Sustainability in its broadest and current form, know the 17 SDGs and understand the functions and possibilities of an



agenda, from its construction to its execution. This finding occurs when comparing this moment with the initial, when they were not aware of the SDGs or could only articulate some of their aspects.

Due to the participatory character adopted in the construction of the agenda, it was also revealed, for teachers, intrinsic values to Education for Sustainability, such as: knowing how to listen, knowing how to live together, sharing, discovering and doing together (Gadotti, 2008). In fact, in the evaluative moment, the teachers emphasized these values, because 15% of them highlighted the collective construction of the agenda as the moment they most enjoyed, and 30% rated the exchange of experience with colleagues as something positive in the proposed training. For Tomio et al. (2016), transforming a school into a sustainable space implies breaking the logic that guides the current dynamics, in the same way that values collectivity, collaboration, cooperative and creative actions, as a change in the education scenario.

Thus, we reinforce that the format of the workshop made the teachers emerge in the theme and, with that, came out of it with some questions. Most of them expressed concerns when, in the final evaluation, they wrote self-reflection questions: "How am I contributing to planet Earth? Why are we knowledgeable of so many problems and, most of the time, we fold our arms for all this? Am I doing my part for a better future for the planet?".

Others understood that the SDGs need partnerships to be developed and expressed concern about this: "These objectives depend on many partnerships to be developed. Let's do our part, and the other?". The other concerns were in the sense of teaching practice: "How can I work the SDGs in the school where I teach? Are we, educators, able to work on the subject in school?" These last questions show that teachers are immersed in a mechanistic and cast school context, which does not allow them to see diverse and creative ways for the didactic planning of these themes.

The reflections made by the participating teachers converge with the fact that continuing education assumes, or should assume, a practical and theoretical character, because the teacher performs, in his educational praxis, actions of thinking, reflecting practice and above all, to generate a learning movement both of teaching, by immersion in professional practice, when in the teacher-student relationship and individual and environment that is (Silva & Souza, 2022).

Education, in general, is very focused on a technological model that does not give enough space for more full-bodied actions in the scope of environmental education, Education for Sustainability and its variants (Rodriguez, 2011). Another problem highlighted in this research is the division of roles between those who design actions or curriculums more focused on socio-environmental issues and those who perform them, because, usually, the policies of schools are verticalized.

FINAL CONSIDERATIONS

In this study, it was possible to identify the possibility of extrapolation of traditional practices in schools, when it comes to sustainability. Generally, what is achieved is awareness or awareness and specific actions focused exclusively on



environmental aspects. In the case of the training discussed here, teachers had the opportunity to participate in a training moment, elaborate concrete proposals (an agenda) and participatory way and reflect on the possibility of integrating local and global socio-environmental problems in environmental agendas in schools.

The SDGs were the protagonists of the training and, from them, the contents on sustainability could be evidenced, revealing their potential as articulators within the context of Education for Sustainability. The proposals for the agenda developed by teachers will serve as a guiding guide and as a model for an environmental agenda that can serve as a basis for other schools in the semi-arid region, the economic and socio-environmental problems of the city in question resemble those of neighboring cities or other regions.

On the other hand, although training has been an advance in the dissemination of elements correlated to Education for Sustainability for that group of teachers, it is necessary to think beyond, that is, through the actions suggested for the agenda, schools can reorganize their practices around this proposal and mobilize the school community for its implementation.

We believe that this movement of training, construction and execution of the agenda can bring fruitful results, since it is a process built from the inside out by agents who thought about the problem and the demands to solve them. It is essential, therefore, that there is continuity of this type of training, since many teachers have demonstrated doubts and dilemmas about the subjects and their own teaching practices.



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