



THE “CHEIRO VERDE NO QUINTAL DA ESCOLA” PROJECT: LITERACY FOR AND BY THE ENVIRONMENT

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Abstract

Since 2013, the teaching, research and outreach project entitled “Cheiro Verde no Quintal da Escola” (literally: Smell of Green in the School Garden) has been developed at Colégio de Aplicação, a primary and secondary school linked to the Federal University of Santa Catarina, Brazil. Still in progress, the Project advocates a multi- and transdisciplinary work on environmental issues, addressing the importance of sustainable models for planting, healthy eating, and protection of nature with primary students, the university community, and society in general. Using the school’s vegetable garden, orchard and other spaces as a kind of living laboratory, the Project has made students and families aware of diverse environmental issues and has pointed out the benefits of a closer contact with nature. As a result, they have become environmentally literate and disseminators of the values they learn and practice in the Project for the environment’s sake, which helps them read and write autonomously in the very first year of primary school.

Keywords: Environment. Environmental Education. Literacy.

PROJETO CHEIRO VERDE NO QUINTAL DA ESCOLA: ALFABETIZAÇÃO PARA E PELO MEIO AMBIENTE

Resumo

O Projeto de Ensino, Pesquisa e Extensão intitulado Cheiro Verde no Quintal da Escola vem sendo desenvolvido no Colégio de Aplicação da UFSC desde 2013. Ainda em andamento, o Projeto preconiza um trabalho multi e transdisciplinar sobre questões ambientais, abordando a importância de modelos sustentáveis de plantio, alimentação saudável e proteção da natureza junto a estudantes da Educação Básica e demais interessados da comunidade universitária e sociedade em geral. Empregando horta, pomar e demais elementos do quintal da escola como uma espécie de laboratório vivo, o Projeto vem conscientizando estudantes e famílias sobre temáticas ambientais diversas e evidenciando os benefícios de um contato mais próximo à natureza. Como resultado, tem-se conseguido alfabetizar os participantes para o meio ambiente, fazendo-os disseminadores dos valores praticados no Cheiro Verde, e pelo meio ambiente, levando-os a lerem e escreverem com autonomia já no primeiro ano do Ensino Fundamental.

Palavras-chave: Meio Ambiente. Educação Ambiental. Alfabetização.

PROYECTO CHEIRO VERDE NO QUINTAL DA ESCOLA: ALFABETIZACIÓN PARA Y POR EL MEDIO AMBIENTE

Resumen

El Proyecto de Enseñanza, Pesquisa y Extensión intitulado Cheiro Verde no Quintal da Escola viene siendo desarrollado en el Colégio de Aplicação de la UFSC desde 2013. Aún en marcha, el Proyecto preconiza un trabajo multi y transdisciplinario sobre cuestiones ambientales, abordando la importancia de modelos sostenibles de plantio, alimentación saludable y protección de la naturaleza junto a estudiantes de la Educación Básica y demás interesados de la comunidad universitaria y sociedad en general. Empleando huerta, pomar y demás elementos del quintal de la escuela como una especie de laboratorio vivo, el Proyecto viene concienciando a estudiantes y familias sobre temáticas ambientales diversas y evidenciando los beneficios de un contacto más cercano a la naturaleza. Como resultado, se ha conseguido alfabetizar los participantes para el medio ambiente, haciéndolos diseminadores de los valores practicados en el Cheiro Verde y por el medio ambiente, llevándolos a leer y escribir con autonomía ya en el primer año de la Enseñanza Fundamental.

Palabras-clave: Medio Ambiente. Educación Ambiental. Alfabetización.



INTRODUCTION

This paper aims to introduce the “Cheiro Verde no Quintal da Escola” project (literally translated as: “Smell of Green in the School Garden”), describe its conceptual bases and activities and emphasizing its role in the literacy process of the participating children. It should be noted that the kind of literacy referred to here are two, namely: literacy for/about the environment, and literacy by the environment. Having said that, what follows is a brief description of the project.

Since 2013, the “Cheiro Verde no Quintal da Escola” (henceforth referred to by its short title “Cheiro Verde”) project – an extension of the “Um caminho diferente para aprender a ler e escrever” project (literally: “A different path to learn how to read and write”) – has been developed at Colégio de Aplicação, a primary and secondary school linked to the Federal University of Santa Catarina (UFSC), Brazil, and has grown significantly each year. Involving teachers and undergraduate scholarship holders, Cheiro Verde is implemented during school hours among first graders from Class A and all sixth graders, primary school. Outside school hours, the Project is open to all school communities, students from other schools in the city of Florianópolis, Brazil, and the so-called Greater Florianópolis, undergraduates and other interested people. Partnerships were established with other institutions and with teachers from other UFSC centers. Therefore, Cheiro Verde is characterized as a teaching, research and outreach project.

It is characterized as a teaching project since the activities that are carried out during school hours establish a partnership with teachers from different subjects, already contributors to the proposal, hence a transdisciplinary approach. The Project involves research as a follow-up questionnaire is filled out both at the beginning of the activities in order to delineate the implementation of the proposal, and at the end in order to evaluate the outcomes of the actions. It also involves research on environmental issues, planting systems, plants, animals, among many other environment-related topics, which are shared with the public by means of publications, participation in external events, in the school’s Pedagogical Exhibition, and during the Teaching, Research and Outreach Week (SEPEX) of the Federal University of Santa Catarina.

It is characterized as an outreach project since outside school hours it is open to the immediate school community and other schools in Greater Florianópolis, who come to visit the garden and learn the other activities of the project (e.g. composting and earthworm culture), in addition to classes from several undergraduate courses of UFSC, who participate in workshops and come to seek assistance to set up gardens in other institutions. It is definitely an outreach project given its partnership with the indigenous community of the Wherá Tupã Poty Djá school,

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from the M'Biguaçu village, with whom the Project exchanges seeds and seedlings of native medicinal plants and also exchanges knowledge about working with nature. In 2018, the Project established a partnership with the University "Marta Abreu" of Las Villas, in Santa Clara, Cuba, and with the NGO Pro Naturaleza - Rosa Elena Simeón, from Sagua la Grande, also in Cuba. This partnership consists of exchanges of information on environmental issues between the students of the Project and students from those institutions by means of emails, letters, and exchange of materials with the aim of organizing future publications. It should be noted that the Project has partners that, in a variety of ways, make the work feasible, such as the Prorector's Office for Outreach and Extension (PROEX/UFSC), the Prorector's Office for Undergraduate Studies (DIP/PROGRAD/UFSC), the UFSC Library, and the University City Hall (UFSC). Partners from other sectors of society are also involved, such as members of the Municipal Program for Urban Agriculture (PMAU, Florianópolis), which includes the Secretariat of Health; the Municipal Foundation for the Environment (FLORAM); the Bureau of Fisheries and Agriculture; the Autarquia de Melhoramentos da Capital (COMCAP), which has been a partner since the creation of the project; the Agricultural Research and Rural Extension Company of Santa Catarina (EPAGRI); and Sesc Cacupé.

With regard to Teaching, Research and Outreach, what drives the Project is the desire to promote dialogues and reflections about the environment, focusing on these three aspects: sustainability, healthy eating, and the interaction between the human being and nature. Based on this perspective, the activities carried out by the Project outside and during school hours aim to lead the participants to realize that the school's garden and orchard favor ecological preservation and an exchange between popular wisdom and scientific knowledge, which makes a culturally diversified education possible. In addition to these benefits, as pointed out by Gadotti (2003, p. 62, our translation), this Project agrees on other potentialities of working with gardens, orchards, nature:

A small garden, a plant bed, a cultivated plot of ground are a microcosm of the whole natural world. In it we find life forms, life resources, life processes. Based on it we can reconceptualize our school curriculum. By building and cultivating it we can learn many things. Children shall see it as the source of so many mysteries! It teaches us the values of emotionality with the Earth: life, death, survival, values of patience, perseverance, creativity, adaptation, transformation, renewal.

The above citation, which reflects the spirit of the work developed by the Project, is also in line with what is expected of an activity designed in accordance with the National Policy for Environmental Education (Law No. 9.795/99), whose first article defines environmental

education as “[...] processes through which the individual and the collectivity build social values, knowledge and abilities, attitudes and competencies aimed at the conservation of the environment, an asset of common use by the people which is essential to a healthy quality of life and its sustainability.” Thus, environmental awareness-raising, outreach and literacy, undertaken with current and future generations, are the way out of the finiteness of the planet resources, as well as a path to teaching reading and writing in real and meaningful contexts of language use, as described as follows.

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CONCEPTION

Considering that Brazil’s Federal Constitution of 1988, in its Article 225, Paragraph 1, Item VI, assures everyone the right to an ecologically balanced environment as an asset of common use by the people which is essential to a healthy quality of life, having the State the duty of “promoting environmental education at all levels of education and public awareness for the preservation of the environment”, the proposal of the “Cheiro Verde no Quintal da Escola” project understands that literacy for/by the environment is provide people with knowledge fundamental to the preservation of nature and its precious resources – a learning process that everyone should experience nowadays given the general framework of squandering to which the planet has been subjected (CAPRA, 2003). Initiating this teaching and learning process with children at a young age, inside and outside school, is more likely to be effective, as it is a developmental stage in which they are more open to new knowledge and where habits can be (re)taught.

In addition, preparing children for the proper treatment of the environment that surrounds them makes them multipliers of that knowledge as they take it home and start to expect from their family new practices that are more in line with the values they are learning. Still in this line of thought, it should be noted that children are the future. And as future is built in the present, Cheiro Verde understands that the need to share knowledge about care with nature is urgente, so that the construction of a more human, environmentally responsible and of high values world is possible (CAPRA, 2003; GADOTTI, 2003).

Among the knowledges that the Project seeks to cultivate are the concepts of agroforestry, syntropical agriculture and agroecology. Principles of ecology, reuse, recycling and composting are also practiced, and disposable materials are used to make, for example, plant pots

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and organic waste for composting. The concepts of healthy eating and food preparation in cooking workshops are also worked on.

In what regards the concept of agroforestry, the Project aims to demonstrate to the participants the benefits of exploring land in a sustainable way, that is, by combining “the production of crops (including tree crops) and forest plants and/or animals simultaneously or sequentially, on the same unit of land and applies management practices that are compatible with the cultural practices of the local population” (KING & CHANDLER, 1978). It is, therefore, a model of planting that seeks to emulate what happens in a natural forest. To adapt this practice to the school garden, the project explores the concept of syntropic farming, which advocates the integration of food production with the dynamics of natural regeneration of forests. As it is an urban garden, this ideal is attained through the crop consortiation technique, which targets to take and make of of as many resources as possible such as soil, water and sun. That is why the plant beds in Colégio de Aplicação contain vegetables, fruit trees, flower trees, spices, medicinal plants and various flowers.



Figure 1: The school community visiting the vegetable garden at the stages of post-planting and then harvesting
Source: Photos taken by the authors

Still in the effort to sensitize and instruct students, their families and other participants about the environmental degradation that the traditional models of agriculture imply, the products produced in the Cheiro Verde project are cultivated in a natural way, that is to say, without the use of agrochemicals and soluble chemical fertilizers; hence the Project’s interest in composting and earthworm culture. What is produced in the school garden is used to make the school meals thus benefiting the participants of the Project and all the students of the school – the surplus is donated. Through all these concepts, the environmental education proposal presented here has reiterated year by year that the school garden is an example of how the soil is a living organism and that what is done with it is what is received in return. Having exposed the

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guiding concepts of the proposal, the following section presents some of the activities that are carried out in the Project.

ACTIVITIES DEVELOPED

The “Cheiro Verde no Quintal da Escola” project began in 2013, with the installation of beds for the planting of vegetables. From 2014, the Project adopted the concept of agroforestry, thus including fruit trees near the vegetable beds. Every year, in the literacy class of first graders, teacher Mariza uses a class mascot (a stuffed animal) which is always the great incentive of the activities to be developed in the Project.

From this perspective, for the year 2014, teacher Mariza chose a turtle as the mascot of the class, which would trigger both the linguistic and the ecological literacy proposals. Named Tamu, the mascot was the ludic object that allowed exploring environmental issues such as global warming, pollution and its consequences for the ecosystem, since depending on the temperature more female than male turtles are born and this affects the survival of the species. The introduction of the mascot is always done in a contextualized way and as real-like as possible. So, Tamu came from the TAMAR Project from Aracaju, State of Sergipe, Brazil, and was presented to the children, along with photos and a recorded video, by Rejane, a biologist from TAMAR Project from Aracaju. The mascot’s discourse is that he came to that school to learn how to read and write with his classmates, and also teach them many things about nature.

The presence of this new friend stimulated classroom research on the life of sea turtles, their habitat, in addition to field trips for a better understanding of how to protect sea turtles and their environment.



Figure 2: The school children visiting the TAMAR Project from Florianópolis, SC, Brazil
Source: Photos taken by the authors

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Besides the search for more information about turtles, the Project also led its participants to learn more about marine diversity on a visit to the Oceanographic Museum of Complexo Ambiental Cyro Gevaerd – SANTUR Zoo in Balneário Camboriú, SC, Brazil.

After all the research, records and discussions on the topic of sea turtles and global warming, the children wrote a book and took the responsibility, with the help of the teacher, to compile in it the information and knowledge acquired in the Project, and they also illustrated the book with the help of the teacher and plastic artist Karin Roskamp.



Figure 3: Book produced by the children, exposed as a mural at the Continente Park Shopping mal, and the launch of the book in brochure format in the school auditorium
Source: Photos taken by the authors

Initially, the book was published as a mural at the Exposição Tartarugas Marinhas (Sea Turtle Exhibition) at the Continente Park Shopping mall and at the TAMAR Project headquarters, both in the city of Florianópolis, Brazil. Subsequently, the book was published in partnership with the UFSC Library and the TAMAR Project, and was distributed free of charge throughout Brazil and abroad by the very TAMAR Project. Another very striking action for the project participants that resulted from the partnership with TAMAR was the production of a stopmotion movie.



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Figure 4: First graders from Class A producing the movie “Tamu e seus amigos: navegue nesta aventura” (Tamu and his friends: join this adventure)

Source: Photos taken by the authors

Codirected by artist Diego de los Campos, who assisted in the recording and editing of the movie, the representation of the story comprised elements of the school garden cultivated by students throughout the year, such as fruits, greens and vegetables. The animation entitled “Tamu e seus amigos: navegue nesta aventura” (Tamu and his friends: join this adventure) was selected for the ECOCINE film festival and screened in the PARATY ECO FESTIVAL, at the University of Campinas (UNICAMP, city of Campinas) and in the city of São Paulo, Brazil. The movie was also classified for the 19th Florianópolis Audiovisual Mercosul (FAM) film festival, in Florianópolis, Brazil, and is now available on the TAMAR website: <http://www.tamar.org.br/noticia1.php?cod=613>. Therefore, the book and the movie were products of an entire year of learning about the situation of sea turtles, threatened by the advance of pollution in the seas and by environmental degradation that leads to global warming, and about the importance of preserving the environment to ensure the maintenance of biological diversity.

As the Cheiro Verde project is committed to reinventing itself every year, besides encompassing planting-related activities, it strives to explore themes that are related to environmental issues. In 2015, the theme explored was water. Under the slogan “The water you do not see but consume”, awareness was raised about saving water with simple attitudes on a daily basis, such as turning off the faucet while brushing the teeth, and spending less time in the shower. Additionally, the concept of a water footprint was also worked on, which tackles the volume of water used to produce food and other industrialized products, which helps understand how our choices of production and consumption affect natural resources (DA SILVA et al., 2013). In that year, the mascot used for the activities in the literacy class was a dolphin, named Dolfi.

In 2016, the mascot was a capuchin monkey named Catu, which was chosen because in the school surroundings there are many marmosets – non-native to that region. They inspired the discussions about natural habitat and about the consequences of an ecological imbalance for the survival of several species. In addition, with the outbreaks of dengue, chikungunya and zika occurring in various locations throughout Brazil, the Project participants also faced the challenge

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of seeking information on ways to combat or ward off the mosquitoes by using elements obtained straight from nature. They found that in addition to crotalaria, which attracts dragonflies, great predators of mosquitoes, there are many other plants that can help to ward off mosquitoes, acting as natural repellents. They researched, watched documentaries and videos, read, took notes, and then made a bed with those plant species. To keep a record of the knowledge acquired, they wrote the book “Plantas que repelem mosquitos” (Plants that repel mosquitos). The work was published in several media and during the Teaching, Research and Outreach Week (SEPEX) of the Federal University of Santa Catarina.

In 2017, the catalytic themes for the process of knowledge acquisition on environment-related topics were the implementation of a medicinal plant bed based on the Chinese Body Clock¹ and on the observation and study of native bees or stingless bees that settled on the backyard wall of the school. The proposal of the medicinal plant bed followed the work method characterized by the construction of a garden in the form of a clock.



Figure 5: First graders from Class A and sixth graders making the medicinal plant bed, and outdoor classes on medicinal plants and how to use them

Source: Photos taken by the authors

In order to put into practice the medicinal body clock, the selection of medicinal plants and the study about them, the Project counted on the collaboration of teacher Alésio dos Passos Santos. Known as “plant magician”, he acts as an environmentalist, cultivator and collector of medicinal plants. In the backyard of the school, he taught first graders from Class A and all sixth graders about various plants and how each could be prepared to help combat or even prevent disease. For this particular activity, the Project also counted on the consulting and collaboration of Dr. César Paulo Simionato, coordinator of the Medicinal Garden of the University Hospital of UFSC. The formal knowledge brought by these partnerships was supplemented by popular

¹ In the Chinese medicine, this work method follows the principle that “each plant has a specific time to act in a certain organ of our body, which is the best functioning time” (VIEIRA, EPIFANIO, SODRÉ, 2017, p. 09)

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wisdom, which was investigated by the first graders by means of interviews with their grandparents about teas and medicinal plants in general.

The Body Clock and the Medicinal Plants activities made it possible to develop a multidisciplinary work involving several areas. Besides the knowledge about medicinal plants addressing identification and safe use those plants, planting and reproduction of their seedlings, tea tasting, the classes also explored organs of the human body and their functions. Reflections upon healthy eating and food safety, basic health care, environmental education and preservation were also encouraged. In order to emphasize the importance of healthy food and the issue of food safety, fruit tasting activities and cooking workshops were held with healthy foods and natural recipes.



Figure 6: First graders from Class A and sixth graders in a healthy cooking workshop preparing a banana cake with teacher Maria Elza

Source: Photos taken by the authors

As for the proposal of studying native bees or stingless bees, the topic was explored regarding the direct and interdependent relationship between native bees and plants, since the latter depend on pollination for reproduction and the former depend on plants for food. The participants were also asked to reflect on the risk of a decrease in the bee population, as this implies loss of plant biodiversity, which affects the food chain of all animals, including humans. For the first graders, the work was conducted by using mascot Bely, a plush bee of the species *Melipona quadrifasciata*, commonly known in Brazil as Mandaçaia. The mascot was used to foster the group to explore the ecosystem and issues such as preservation of the environment, habitat, food chain, extinction of species, respect for differences, etc. Also, the affection for Bely displayed by the children was crucial to make them feel safe and interested in observing the colonies of stingless bee of the species *Plebeia droryana* that live in the school backyard. The observation of the bees worked as a bridge for the study of their life cycle and how to deal with them, which stimulated the students to plant flowers around the school area to guarantee the

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bees’ source of food. To study the bees, the Project established a partnership with UFSC’s Native Bees Laboratory (LANUFSC) and with the Agricultural Research and Rural Extension Company of Santa Catarina (EPAGRI).

Given the importance of bees for biodiversity maintenance, food production in the world, the development of a sustainable world, and considering that they are threatened with extinction, the Project decided to continue the discussions on bees in 2018, with a stingless bee of the species *Plebeia droryana*, named Mel, as the mascot for the first graders from Class A. The school has started a campaign to disseminate information about the importance of bees and expects to invest in the creation of a space in the school backyard called Recanto das Abelhas-Sem-Ferrão (literally: Nook of the Stingless Bees), where native bee hives will be installed where native bee hives will be installed in order to make it a "bee-friendly school". Parallel to the work on bees, the sixth graders have been conducting studies on unconventional edible plants, the construction of an exsiccate and a scale model of the school garden. All this work is also being socialized with Cuban children who are assisted by partner institutions in Cuba by means of emails and letters, between students from here and there, reporting on how environmental issues are handled in their respective schools and countries.

As described so far, it can be seen that the participation of the first graders from Class A in the Project, aged between six and seven, takes place in a playful way and they can learn to read and write in an environmental education context. This is what is called here ‘literacy by the environment’, as the Cheiro Verde’s work proposals are aimed at sensitization and awareness raising about environmental issues to teach students to read and write independently. In this sense, from the outset, one starts from the conception that learning to read should not be an end in itself. It must rather be a means - the means by which it is possible to pursue and achieve further learning, using, for that, reading. In this way, the activities of research, recording, reporting, discussion and exposure motivated by the Project in the children play a central role in their development in written language as well. The same is true of sixth graders, who broaden their curricular knowledge in science and their repertoire of textual genres by coming into contact with different study materials during their research. The constant activity of data recording and, finally, the organization of the acquired knowledge in books also by the sixth graders encourage a contextualized reflection upon written language in the Portuguese classes.

THE BENEFITS REAPED SO FAR

Since 2013, the conducting of the “Cheiro Verde no Quintal da Escola” project have been producing several accomplishments. In the first place, the outcome most clearly perceived by the participants in the project is the question of environmental and linguistic literacy in a playful way, which encourages early research, reflection and exchange of knowledge. Another important aspect is the support offered by the students’ families with the donation of seeds, seedlings and materials for the making of the plant beds and seedling nurseries maintained by Cheiro Verde. Attitudes such as those reflects to the school community the Project’s potential, throughout its existence, to positively impact the eating habits, hygiene and relationship with nature of the first graders from Class A and the sixth graders.

However, there are still many challenges to be overcome when it comes to sensitizing students to a more natural life, especially sixth graders whose childhood did not necessarily include environment-related practices so today they have difficulties in seeing the school garden as an expansion of the classroom, as a space for learning, for transmitting knowledge. At the beginning of healthy-cooking and tasting activities, many students tend to reject fruits such as melons, mangoes, papayas, and prefer fruits such as bananas and apples, that is, little food diversity. Something similar happens in the cooking workshops, where students usually ask to add more sugar or salt to the recipes, which demonstrates a taste already habituated to the processed products of the food industry. After a few months of work, it can be seen that even among the most resistant students, there are those who begin to change their posture and to value the activities carried out by the Project. Perhaps because the garden project is less integrated into the sixth-grade curriculum compared to the first-grade one, there will eventually exist such initial strangeness about why and what for going to the garden, digging, planting, watering, harvesting, observing. In this regard, year after year, efforts have been made to involve more sixth-grade teachers and subjects in the execution of the Project. Currently, the Science and Portuguese courses are collaborating with Cheiro Verde.

A positive aspect of the Project, in its five years of existence, are the books written by its participants, which brought together the collective acquired knowledge. Examples that can be mentioned are the books released by the first graders from Class A on earthworms (2013), sea turtles (2014), dolphins (2015), mosquito repellent plants (2016) and medicinal plants (2017) which were and are used as educational resources in Colégio Aplicação and which are also made available to the schools that visit the Project. The sixth graders also produced books on those subjects, in particular on plants, approaching medicinal plants, spices and flowers. Among the

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abovementioned books, the books “Minhocas” (Earthworms) and “Tartarugas Marinhas” (Sea Turtles) were edited and included in the collection of the UFSC Central Library (BU) and that of the school. These two books are part of the Quintal da Escola Series, created by BU to publish the work produced by the Cheiro Verde project.

The edited materials are distributed to schools at the TAMAR offices and are also sent to the indigenous community of the Wherá Tupã Poty Djá school, from the M'Biguaçu village, to the new partners at the University "Marta Abreu" of Las Villas, in Santa Clara, and to the NGO Pro Naturaleza - Rosa Elena Simeón, from Sagua la Grande, both in Cuba. This partnership was established after TAMAR sent them the materials on sea turtles produced by the Cheiro Verde project.

The benefits reaped of the work done by the Project are divulged through the Bio na Escola² webpage, the SEPEX, the Mostra Pedagógica do Colégio de Aplicação, interviews to the UFSC radio station, television channels, Portal G1 Santa Catarina, G1 Globo, the school website, the Revista Gestão Universitária, the TAMAR website, exhibitions, mini-courses, and the PROEX-UFSC extension catalog.

Finally, in recognition of all the work carried out by the “Cheiro Verde no Quintal da Escola” in 2018, the project was awarded as one of the winners of the 2º Prêmio Escoteiros do Brasil de Educação (2nd Brazil Scout Education Award) for its perspective on eco-literacy, which combines children's literacy with environmental awareness and healthy eating.

FINAL REMARKS

This paper aimed to show that environmental education is a tool for addressing environmental problems in the education dimension, capable of contributing to social changes and transformations, as proclaimed by the National Environmental Education Program – ProNEA (BRAZIL, 2005). Additionally, when integrated into the curriculum, it is a powerful instrument for student literacy. Academic education and environmental education have in the garden and orchard a living laboratory that enables the development of several pedagogical activities in environmental and food education, uniting theory and practice in a meaningful and contextualized way, assisting in the teaching-learning process and narrowing relationships through the promotion of collective and cooperative work among the social agents involved in the search for a sustainability culture.

² It is the Biological Sciences Subproject of the Institutional Program of Teaching Initiation (Bio PIBID - UFSC) in which the work carried out by the scholarship holders at the schools where they work are presented in these respective schools for the knowledge of the whole school community (students, teachers, technicians and families)

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The presentation of the “Cheiro Verde no Quintal da Escola” project and the accounts about it aimed to lead to the understanding that it is very important that each one does something to preserve nature and assure that the next generations have the right to survive and enjoy the resources we have today; after all, everything we use and consume is being taken away. It is an ongoing challenge, in the face of a society increasingly alienated from nature, to realize that resources are finite, that science and technology can not save humanity in a scenario of scarcity of natural resources. Hence the urgent need to instruct the population, the new generations, towards a differentiated sensitivity to the issues related to nature, to make them understand that consumption has a price that is not only monetary, but also environmental and social.

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