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Activity Proposals to Improve Children's Climate Literacy and Environmental Literacy

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Abstract: With the climate crisis, schools have a fundamental role to enrich children's climate literacy, which should begin in their early years and continue for life. Developing activities in the classroom can be an excellent way of bringing this about. This work is part of a larger research project, during which a previous study was carried out with 245 children aged 9 to 13, in which we identified some limitations in their knowledge about climate change. Based on these results, we decided to present some proposals for activities that could help improve these children's climate literacy. The study we conducted was of an exploratory character, and the main objective was to understand the impact of applying a set of activities to 54 children. The objectives of this work were to increase the climate literacy of the children involved—more specifically, to evaluate the impact of implementing three activities related to climate change and identify the knowledge about the cases and consequences of climate change that were acquired by the children involved. To collect the data, we used a focus group technique and content analysis to process it. The results revealed that the children acquired a better understanding of the problem of climate change—in particular, the causes and consequences of it and of the concept of the ecological footprint—as well as motivation to contribute to mitigating the problem. We conclude that the activities proposed could contribute to improving climate literacy, as well as stimulate children's curiosity and proactivity so that they become citizens capable of exercising their active citizenship.

Keywords: activities; climate change; climate literacy; education; school

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Citation: Ramos, R.; Rodrigues, M.J.; Rodrigues, I. Activity Proposals to Improve Children's Climate Literacy and Environmental Literacy. *Educ. Sci.* **2024**, *14*, 194. https://doi.org/10.3390/educsci14020194

Academic Editor: Eila Jeronen

Received: 5 January 2024
Revised: 8 February 2024
Accepted: 10 February 2024
Published: 15 February 2024

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1. Introduction

As the planet faces numerous environmental challenges, a better understanding of the climate crisis is required, which in turn requires an improvement in the scientific literacy associated with this issue. As climate change is one of the greatest threats to the future, robust climate literacy is needed because it represents the ability to understand and respond to climate phenomena, and it should emerge as a fundamental pillar in the education system, as well as be addressed in the earliest years of schooling [1]. Mitigating the climate crisis is not only an environmental issue but also a question of guaranteeing children's rights [2], considering that the cognitive and socio-emotional triggers they develop in their early years have long-lasting impacts. About 90% of brain development takes place in childhood, which is why it is suggested that activities involving play are fundamental for learning, and it is at this age that we should help to build an affective bond between children and nature, trying to incentivize them to develop attitudes and behaviors to preserve the environment and perpetuate them into adulthood [3]. This premise is even more relevant in the "Western world", where climate change tends to be perceived as a distant phenomenon [4,5], and climate literacy is lower than expected [6–8].

Lifestyles that we can no longer abandon, such as air-conditioned homes, processed food, and constant consumerism, driven by marketing and advertising, contribute to moving us away from a more environmentalist lifestyle [9]. It is essential to increase citizens' environmental awareness and climate literacy so that they may be able to reduce their ecological footprint, defined as the total area of land needed to provide the natural resources that an individual (a student or a community—for example, a school) consumes and its capacity to absorb the waste and pollution it produces [10]. In the context of climate change, schools should raise awareness and offer a series of strategies aimed at helping students understand the connection between their behavioral choices and their impact on ecological systems, in order to make it possible for students to think critically about their choices and the environmental consequences of those choices and to feel the responsibility they have as members of a community for active sustainability, in order to increase climate literacy [11]. A person with a reasonable level of climate literacy is able to understand the essential principles of the earth's climate system, to evaluate scientifically credible information about the climate, to communicate scientific knowledge about the climate in an efficient and well-founded manner, and, in this way, be able to make informed and responsible decisions [12]. We are conscious that climate science includes complicated topics (for example, the interaction between climates at local, regional, and global scales) that are associated with largely unfamiliar terms and concepts (radiative forcing, aerosols, types of gases, etc.), which makes it challenging to reach full climate literacy [13]. In order to improve climate literacy effectively, schools have a key role to play as they are responsible for educating students about the climate crisis. However, studies on teachers show that they lack the skills to teach about this topic [14]. Difficulties include the complexity of the topics, relating abstract concepts to practical actions, and the lack of adequate educational resources. That is why there is an urgent need to increase methods that can contribute to the climate literacy of the youngest students [14,15], but the literature examining children's understanding and perception of climate change is very scarce [16–18]. Schools must invest more in implementing activities in the classroom for learning. Activities have advantages over traditional theoretical classes to better understand an abstract or more difficult concept [14]. More specifically, the objectives are (1) to evaluate the impact of the three activities implemented; (2) to evaluate whether the children acquired knowledge about climate change (consequences and causes of climate change); (3) and to understand their motivation for pro-environmental behavior after the activities.

The activities proposed in this study follow from a previous study by the same authors [6], which identified some perceptions that the children involved in the study had about climate change. These children showed difficulties in distinguishing between the causes and consequences of climate change and a lack of knowledge of the concept of the ecological footprint, among other things. The activities we present here, offered, in our view, moments of observation, research, the interpretation of information, constant questioning, discussion and critical reflection, a confrontation of ideas, hypothesizing, and the communication of results. The reasoned characterization of the choice of each of these activities will be described in detail in the next sections.

2. Materials and Methods

In order to answer the research questions, we chose to use a qualitative methodology, as this is considered the most appropriate for understanding and interpreting the impact of an intervention on a target group [19]. This methodological option does not aim to measure but to understand, more specifically, how the individual thinks and feels when performing their practical work. For data collection, we used a focus group technique, which falls within the scope of qualitative research, in which data are collected via focus group interviews and subsequently presented via transcripts of the answers given by the participants [20]. The focus group technique suggests that between 4 and 12 people should be interviewed. Interaction between participants is the main focus. The moderator only guides the discussion, but participants are free to share their ideas and experiences, and

an attempt is made to explore in depth the perceptions, attitudes, and beliefs of a specific group on a given topic [21]. In our case, a total of 16 people were chosen, 5 for each question, where we tried to understand the impact of the activities. Before implementing the activities, we took care to follow a script that would guide us in the development of each activity. In this guide, we included the purpose of each activity, contextualization, resources to be used, and didactic exploration.

Fifty-four participants were involved who attended the 1st and 2nd cycle of basic education (children from 9 to 13 years old) from two schools in the north-eastern region of Portugal. The choice of this sample was intentional, as the two schools are located in the researcher's geographical area of residence, which facilitated data collection.

The interviewer responsible was one of the researchers of this work, closely observed by teachers in case it was necessary to intervene or provide some type of help. The interview was carried out in the second and last session at both schools; the children interviewed answered the questions directly, there was no difficulty in answering, and there was automatically no need to improve the questions. For this work, we only included an excerpt of their answers, in order to respect page and character limits. We took care in planning each activity, specifically, pre-preparation and conception. We chose to create activities that would engage the children in performing the tasks and that would promote the construction of significant learning. Once the activities had been designed, they were validated by experts in the field, who gave us feedback with suggestions for improvement. Validation was carried out by three people, one of which was a university professor with a PhD, with over 25 years' experience in the field of environmental education, and the other two were teachers trained in the Experimental Science Teaching Training Program, with more than 20 years' experience in 1º. and 2º cycles in mathematics and science, with in-depth knowledge of the contexts and issues under study. This activity guide was changed until the final result was obtained. It was suggested that we avoid words that were too complex and replace them with words that were easier for the children to assimilate. The didactic exploration of the activities—the steps to be carried out—was the one that underwent the most changes because it was suggested that it should be more detailed and precise, as this script could later be used by teachers without difficulty.

The questions were designed to validate the focus group questions. Seven questions were drawn up, in which we tried to focus on the objectives of this study, which were to (1) evaluate the impact of the three activities implemented; (2) evaluate whether the children acquired knowledge about climate change (consequences and causes of climate change); (3) and to understand their motivation for pro-environmental behavior after the activities. Some questions had to be improved, with more accessible language and shorter questions so that the interview did not become too long and in order to avoid it becoming boring.

This research was approved by the Ethics Committee of the University of Trás-os-Montes and Alto Douro (UTAD) and by the Directorate-General for Education. Informed consent was also requested from the parents. But even with their parents' consent, we asked the children themselves if they wanted to take part in the study and explained the objectives of the study, that their voices would be recorded on a tape but that their identity would be respected, and we mentioned that they could withdraw at any time if they did not feel comfortable.

We ensured that the activities were framed within the guidelines provided by the Portuguese Essential Learning document for these study cycles [22], which guides teachers' practices and defines the topics that teachers should address in the classroom. This document warns of the effective importance of learning that helps to consolidate knowledge effectively and to develop complex skills, with abilities such as research, analysis, debate, and reflection. In preparing the activities, we took into account not only the acquisition of knowledge but also the development of critical thinking.

The activities were carried out in May 2023. The activities took place during the month of May 2023. With these activities, we intend to contribute to responding to three of the

Sustainable Development Goals: number 4, which aims for quality education; number 12, the goal clearly connected to the Ecological Footprint; and number 13, which refers to climate action [23]. Below is a brief description of each activity.

2.1. Description of the Activities

The main objectives of the activities proposed were to improve students' climate literacy, learn scientific concepts, and problematize content and develop skills, trying to establish a bridge between theoretical and practical knowledge.

In addition to the activities, we also conducted a preliminary sensitization session, in which the children were encouraged to participate and explain their point of view on the phenomenon of climate change, where any doubts or misconceptions they had about the issue were clarified and any misconceptions they had were rectified. The teaching activities and resources were organized according to the curricular elements in the Portuguese Essential Learning document, which aims to develop a set of skills in different areas of knowledge, namely Biology, Physics, Geography, Geology, History, Chemistry, and Technology; in nature-related fields, the use of simple scientific processes in carrying out experimental activities stands out—manipulating, imagining, creating, or transforming simple technical objects and recognizing how human activity interferes with nature [24].

We have also included the document known as the Environmental Education for Sustainability Reference, which covers the Portuguese education system until the end of secondary education and is part of the set of references prepared by the Directorate-General for Education within the scope of Education for Citizenship. The reference, which is flexible in scope, can be used in a wide variety of contexts, in whole or in part, within the framework of the transversal dimension of Education for Citizenship, in which it refers to climate change, causes, impacts, and the adaptation and mitigation of climate change [25].

2.1.1. Activity 1: "Climate Action" Board Game

Board games can be used as playful educational resources through which concepts can be learned [23]. Authors such as Jason Wu and Joey Lee, in an article published in *Nature Climate Change* in 2015, point out that board games about climate change are great educational resources [26,27]. Following the recommendations of the same authors, we ended up choosing the "Climate Action Board Game", created by the European Union in 2014, which proved to be a great example for enriching climate literacy. The game board can be seen in Figure 1 below.

This game was chosen for several reasons, listed as follows:

- It stimulates students' interest and motivation in the issue of climate change;
- It provides a positive gaming experience, with an attractive graphic design;
- It is adapted for various age groups;
- It provides a broad overview of the problems, mechanisms, challenges, and opportunities related to climate change;
- It introduces relevant basic terminology, including established terms used to discuss climate change [28].

2.1.2. Activity 2: Creating a Terrarium

Building a terrarium allows us to simulate a "mini biosphere", making it possible to observe and analyze the abiotic factors present that are essential for the survival of living beings, such as soil, water, air, and light, as well as simulate a small ecosystem, which can be understood as a closed system, just like our planet [29,30].

This activity was accompanied by the exploration of a multimedia presentation, in which some concepts were introduced, encouraging students to adopt behaviors that promote the sustainability of the planet. Specifically, the activity consisted of raising awareness of topics such as the greenhouse effect, the use of native flora, and the water cycle, as well as energy exchange cycles. In this activity, it was possible to demonstrate that, as sunlight falls on the glass of the terrarium, it will heat up, similar to what occurs in the

Earth's atmosphere as a result of the greenhouse effect. This helps students understand the greenhouse effect as a physical phenomenon, identifying the factors that affect global warming.

Figure 1. Sketch of the "climate action" board game created by the European Union [29].

We took care to choose and think about activities that could cover the spectrum of the subject of environmental studies, which is indispensable for understanding the world around us. Therefore, we wanted to build a bridge between some knowledge from the subject of environmental studies and the construction of the terrarium, within the spectrum of climate change, including the water cycle and the loss of fresh water, photosynthesis, oxygen, and the greenhouse effect.

2.1.3. Activity 3: "The Climate Change Game" Book

The use of children's literature can be relevant in helping to increase climate literacy. Stories can encourage children's curiosity, increase their knowledge, and enrich their experiences, bringing them into contact with scientific themes and content, providing meaningful learning, and also playing an important role in mediating knowledge. It is possible, using books, to provide situations for debate and discussion that develop language and communication skills, making lessons more interesting and motivating [30]. In these children's literature, we had the chance to access a unique knowledge of the world, expanding their horizons from a variety of perspectives (cognitive, linguistic, and cultural) [31,32] Also, science and literature, despite having specific languages when included in interaction, enhance the acquisition of knowledge and the development of various skills, be they scientific, literary, or even personal and social, especially when it comes to children and young people [33,34].

The book chosen was "The Climate Change Game" by Bruno Pinto, Quico Nogueira and Nuno Duarte from 2021. It is a book that helps children understand what efforts are being made to mitigate the problem of climate change. As we progress through the story, we come to know the cities of Europe and their customs, art, and culture. In addition, through an excellent and attractive comic strip, we identify the consequences of climate change. The book is a way of communicating with children and young readers of all ages about this contemporary issue that will affect their generations and future generations [35].

2.2. Data Collection Technique: Focus Group—Evaluation of Activities

With regard to the data collection technique, as already mentioned, we opted for a focus group interview, with the aim of collecting information rich in detail, allowing us to approach the subjective universe of the interviewee in a privileged way, i.e., the representations and meanings they attribute to the world around them or to what happens in the activity [35]. The focus group as a research technique for collecting data through discussion with a group on a particular topic was presented by the researcher [36]. The focus group can be used as a resource to understand the process of constructing the perceptions, attitudes, and social representations of human groups. In order to carry out the focus group, a script was drawn up that contained clear instructions, such as the type of questions to be asked and fields that the researcher could fill in, such as interview time, number of interviewees, their responses, or other details that were considered relevant. The interviews were audio-recorded with the express permission of each participant, following research ethics guidelines for the two activity sessions [37].

The transcripts of the interviewees' statements were typed in full, preserving their anonymity. For this article, those that we found most relevant were transcribed. The children participating in the focus group were chosen at random, always with the informed consent of the children, who voluntarily agreed to participate in answering one or more questions.

3. Results

The children were very participative and interested in carrying out the various proposed activities, always being very committed and active. The activities were worked on in four classes, each containing between 12 and 17 students. Groups of 4 to 5 students were formed in each class, which made it possible for us to become closer to the children.

Sixteen participants were chosen to respond to the focus group; all of them provided positive feedback on the activities carried out, saying that it was a different day, fun, and special, among other words. These 16 and the remaining 38 children were asked to summarize the activities in a few words. The summary of the answers can be seen in Figure 2 below.

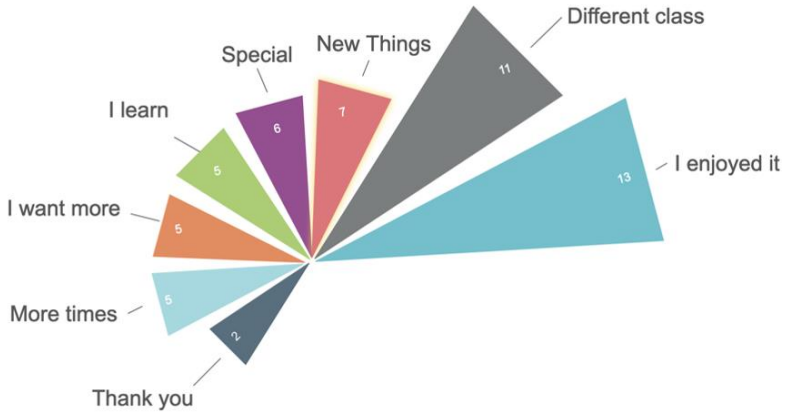

Figure 2. The main keywords mentioned by the 54 children, repeated during the activities.

We compiled Table 1 with the questions that were asked of the children participating in the focus group and their answers. Our main objective was to develop the children's climate literacy, but we also wanted to discover the following:

- The impact of the activity on the students (Tables 2 and 3);
- If the students acquired knowledge about climate change (Table 4);
- If, after the activities, the students were motivated to adopt pro-environmental behaviors in relation to climate change (Table 5).

Table 1. Sample description with schools, grade, and number of children per session.

Sample			
Schools	**Grade**	**nº of Children**	**nº of Children per Session (2)**
Escola EB 2,3 Augusto Moreno, Bragança, Portugal	4.º, 6.º grade (9–13 years old)	30	14/16
Escola EB23 Paulo Quintela, Bragança, Portugal	4.º, 6.º grade (9–13 years old)	24	10/14

Table 2. Impact of the activities on the participating children. P = participant; S = Session.

To Understand the Impact of the Activity	
	Answers (n = 5)
1- What aspects of the activities caught your attention the most?	P1:S1: I liked hearing about climate change and the things we buy that come by plane and boat and emit a lot of smoke. P2:S1: Today was a different lesson; I liked listening this scientist. P3:S1: There were things I did not know; I like science and these things.
2- What were the two main contributions of these activities for you?	P4:S2: It was a different day; we learned lots of new things. P5:S1: We learned a lot of new things; it was a different lesson.

Table 3. Quotes from the children about the activities being appropriate for the age group of the participants; S = Session.

To Understand if the Activities Were Appropriate for the Age Group of the Children Involved	
	Answers (n = 5)
3- Did you experience any difficulties during the activity? Any concepts you did not know the meaning of? If you had any difficulty doing the activity, can you indicate what it was?	P6:S1: I did not find it difficult. But I wanted my own terrarium. P7:S2: I did not find it difficult. P8:S1: I would like to stay longer; I did not find it difficult. P9:S1: I did not find it difficult. P10:S1: I liked the activities and the different day; we learned a lot of new things, and from today, I am going to take better care of the planet.

Table 4. Results relating to the acquisition of knowledge about climate change. P = participant; S = Session.

To Check if the Students Acquired Knowledge about Climate Change	
	Answers (n = 5)
4- After attending the sensitization session and doing these activities, can you tell me what contributes to (actions, behaviors, factors) or influences climate change? 5- After attending the sensitization session and doing these activities, can you identify the consequences of climate change?	P11:S1: Climate change is caused by buying things we do not need and by eating too much animal meat. The bad things are the greenhouse effect and higher temperatures that melt the ice and increase the sea. P12:S1: The many factories that exist pollute the air a lot, as do cars and trucks. People can die from the heat, such as babies and the elderly. P13:S2: Volcanoes and the sun and people and factories. When the planet heats up, the bears run out of ice and the sea rises and the people on the islands become homeless. P14:S1: Every time we buy clothes that come from far away, and we drive around in cars; smoke helps to increase the temperature and brings problems for nature. P15:S1: When there are fires and when volcanoes explode. They burn the forest and increase the global temperature.

Table 5. Reasons for adopting pro-environmental behaviors in relation to climate change.

To Understand the Motivation to Adopt Pro-Environmental Behaviors in Relation to Climate Change	
	Answers (n = 11)
6- Do you think that, after these activities, you will change your behavior towards the environment? If so, what will (or what can) you do to mitigate (reduce the impact or effect of) this climate change problem?	P16:S1: I am going to tell my grandparents and my cousins about the weather. If I were a ruler, I would arrest everyone who sets fires. P3:S1: When I am older, I will only use a car to go far. I will use my bike. If I were president, I would give bicycles to all the boys. P4:S1: Take a shower more quickly and turn off the lights in the sockets. If I were president, I would give money to scientists to solve the problem. P5:S1: Walking and talking about this to my brother and my cousins. Help with money to buy bicycles and electric cars.
7- If you were a government official, what laws (measures) could you propose to reduce the effect of climate change?	P16:S1: Prison for those who throw rubbish on the floor. P9:S1: Ban cars that emit smoke. P10:S1: Reduce the price of electric cars. P5:S1: Prohibit heating when not necessary. P3:S1: Put more guards on the street to monitor people who litter. P4:S1: Anyone who wastes water will be arrested.

The following tables summarize the excerpts collected.

In Table 2, we transcribed excerpts from the answers given by the children to the question about their perception of the impact of the activities on them. It should be noted that some children answered only one question, and others voluntarily answered two.

By reading Table 1, where five of the children who took part responded, we can see that, as far as the impact of the activity is concerned, the children who took part provided positive feedback, saying that they enjoyed the different lesson and hearing about "new things".

Table 3 shows the excerpts from the children's responses regarding their understanding of the concepts worked on.

Reading the answers provided in Table 2, regarding whether or not the activities were suitable for the age group of those involved in the study, we found that the answers were unanimous in stating that there were no difficulties whatsoever in carrying out the activities.

Table 4 transcribes the comments made by the children to two questions about whether the students had acquired knowledge after carrying out the activities, namely, knowing how to identify the causes and consequences of climate change.

By reading Table 4, we tried to understand whether after carrying out the activities, the children acquired knowledge about climate change. The children's responses were varied; the identification of different anthropogenic behaviors or natural factors that influence climate change as well as the resulting consequences was visible.

In Table 5, we transcribed excerpts of the answers provided by the children to two questions where we tried to understand their motivations for adopting responsible behaviors in favor of the environment—that is, if the impact of the activities sensitized them in such a way that it was intrinsic to the will to mitigate the problem because we agree that the concept of literacy must subsequently be translated into behaviors [38].

By reading Table 5, where six participating children responded, we tried to understand whether after carrying out the activities, the children felt sensitized and motivated to adopt pro-environmental behaviors in relation to climate change. The responses were varied; overall, we realized that the motivation for environmental preservation was present in all the responses obtained.

4. Discussion

In analyzing the answers provided by the 16 children, we were able to verify that they did not experience difficulties in enumerating the causes and consequences of climate change, leading us to infer that the proposed activities contributed to overcoming difficulties that they had previously demonstrated and that had been identified in another study [6].

It was possible to verify that they did not present any level of complexity or obstacles in the elaboration of the activities proposed; the activities aroused permanent curiosity in the children, evidenced by the posing of countless questions throughout their development. At the same time, the children said that the activities were inspiring, showing that they were aware of the issue of climate change, with some presenting some solutions—some more effective than others—but always aiming to preserve the planet. Below, we take a closer look at the different questions we intended to answer.

4.1. Impact of the Activity on Students

With this intervention, it was possible to see an improvement in the children's climate literacy, who seemed to have taken into account the issues discussed and became aware of some concepts—for example, with the concept of the ecological footprint. Many were unaware of the "journeys" that most products take to reach the end consumer and that every time we buy what we do not need, we are in fact compromising our planet. The children mentioned, among several responses, that this intervention mainly helped them learn more about climate change. We verified, as is defended by other authors [14,38] who advocate this type of active methodology, that this method is more captivating for children to learn about different concepts.

4.2. The Activities Are Appropriate to the Age Range of the Students

When analyzing the responses in Table 3, we realized that the participants did not have any difficulty in carrying out the activities. As previously mentioned, the activities were designed and validated by professionals who gave us feedback so that there was no difficulty in carrying them out. Even so, throughout the activities, the researcher was always present and was able to verify the ease with which the 54 children carried out the activities. At the same time, the presence of the researcher was important in case any difficulties arose on the part of the participating children—a situation that did not occur.

4.3. Students Acquired Knowledge about Climate Change

The results of this study confirm other studies, which reported the effectiveness of the use of activities to better understand climate change phenomena [14]. Carrying out practical activities similar to those developed can lead to new reflections, through which children will be able to construct new concepts and, on the other hand, motivate themselves to be more responsible citizens towards the environment [39]. During the analysis of data from the survey carried out in another previous study [6], one of the gaps was to list the causes and consequences of climate change; 48% were unable to list a cause or consequence of climate change. After these interventions, all the children who responded to the focus group interview were able to list actions or behaviors that contribute to climate change, as well as some of their consequences. The majority were able to list at least one to three causes and consequences, leading us to believe that there was in fact an acquisition of knowledge/literacy about climate change.

4.4. Students Are Motivated to Adopt Pro-Environmental Behaviors in Relation to Climate Change

The students seemed to be motivated to improve their behavior in relation to climate change; in fact, the existing bibliography stated that students, when faced with activities of this type, tend to adopt better behavior in relation to the environment [40,41]. All 16 students in the interview were able to list behaviors that aimed to improve or mitigate climate change, whether from an individual or political point of view. Although many responses were creative and others were more radical, we realized, from the range of

responses, that they sought to improve the environment. As we tried to understand the feedback from the groups of children, they revealed motivating speeches to convince them to change their behavior within family contexts, such as the following:

"I'm going to tell my grandparents and my cousins about the weather." P16:S1

This type of discourse is not uncommon when children are confronted with topics about climate change, which can often even influence family purchases and behaviors [15,42,43].

5. Conclusions

As mentioned by other authors, it is important that activities such as reading a book or playing a game continue to be used as a teaching strategy. We argue that these should not be used punctually but that they should be a recurring practice. We concluded that the activities had a positive impact on the participants. These contributed to the development of cognitive, social, and emotional skills, in addition to promoting curiosity and interest in the topic in question. Through these activities, it seemed to us that the children learned about climate change, as well as questioned, analyzed, and experimented, which helped them understand the topic and the world around them. This type of learning environment, fun and stimulating, should be replicated more often and for more classes. In short, the children seemed to learn to list the causes and consequences of climate change; whether natural or anthropogenic, they understood the concept of the ecological footprint and the weight of their actions—such as how shopping and small behavior at home can influence climate change—as well as learned about the greenhouse effect and about GHG gases and their various sources; last but not least, they indicated that they were more motivated to contribute to mitigating the problem.

Based on the above, it is possible to conclude that these types of activities could constitute a great way to improve the curiosity and literacy of participants, and in this way, children can acquire a deeper and more concrete understanding of scientific concepts, helping to make science less intimidating and more accessible for those involved. In summary, the activities offered a practical and interactive approach to learning, which was beneficial for improving children's climate literacy.

The children's message seems to have been summarized in participant no. 8's response:

"I liked the activities and the different day; we learned a lot of new things, and from today on, I will take better care of the planet", P:10: S1

It is essential to train young citizens to learn about real problems, with the aim of providing solutions to them, developing a set of behaviors that lead to environmental protection. This leads us to reflect on the hypothesis that if three activities carried out over two days had such a large impact on children, how large would the impact of a more ambitious activity project be?

Author Contributions: Conceptualization, R.R. and M.J.R.; methodology, R.R.; validation, I.R; formal analysis, I.R.; investigation, R.R.; resources, R.R.; data curation, M.J.R.; writing—original draft preparation, R.R.; writing—review and editing, R.R.; visualization, M.J.R.; supervision, I.R. All authors have read and agreed to the published version of the manuscript.

Funding: This work has been supported by FCT—Fundação para a Ciência e Tecnologia within the Project Scope: UIDB/05777/2020.

Institutional Review Board Statement: The study received ethical approval from the Ethics Commission of the University of Trás-os-Montes e Alto Douro, file number Ref. Doc102-CE-UTAD-2021, and date of approval: 30 March 2022. This study was conducted in accordance with the General Direction of Portuguese Education and approved, with the number 0811200001.

Informed Consent Statement: Informed consent was obtained from all the subjects involved in the study.

Data Availability Statement: No new data were created or analyzed in this study.

Conflicts of Interest: The authors declare no conflict of interest.

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