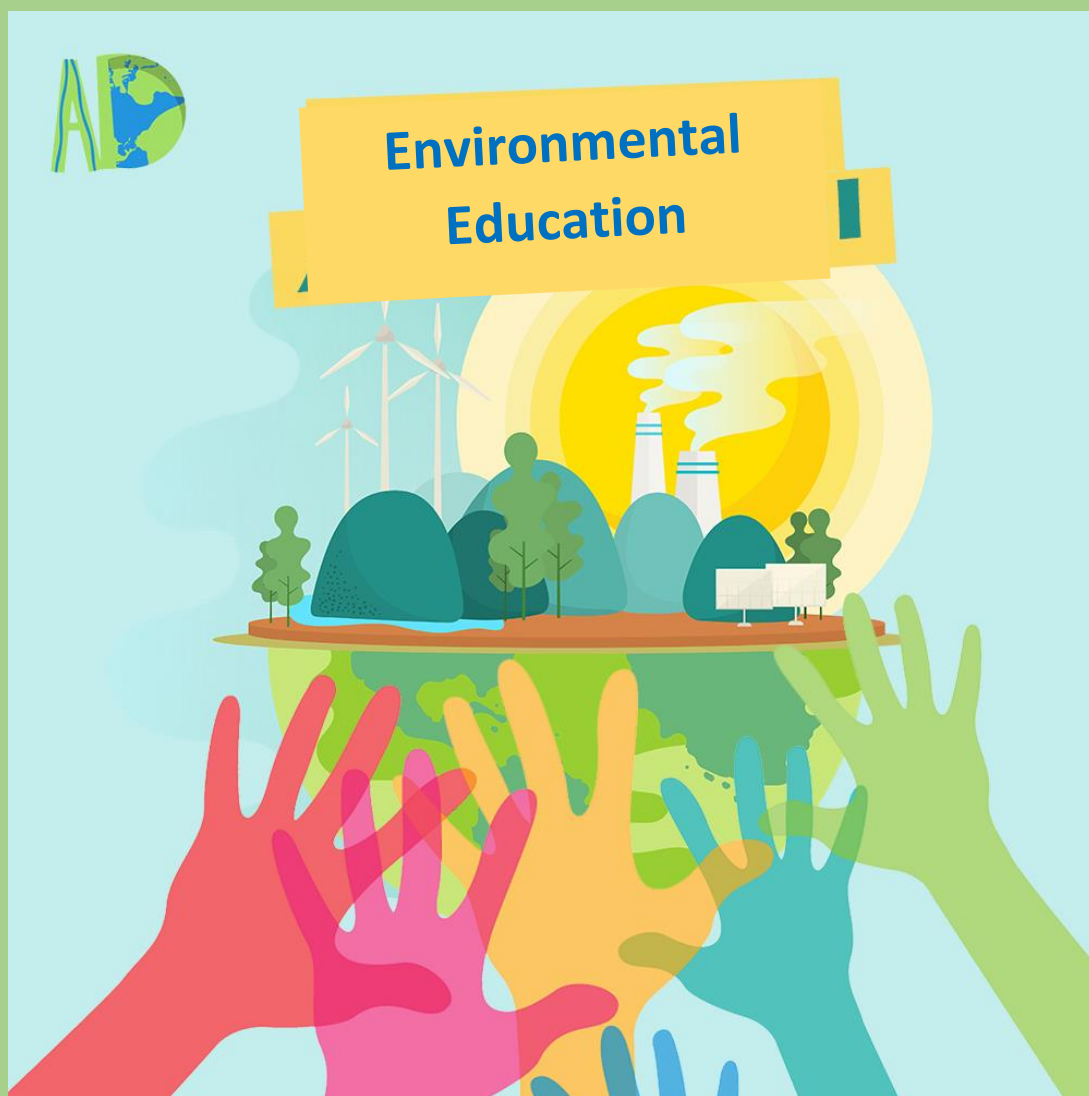# EcoMídias – FOCUS on EE

Environmental Education

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FOA

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CONTENTS

INTRODUCTION

This is the final project submitted in partial fulfillment of the requirements for the degree of master in the Professional Master's Degree in Teaching Health and Environmental Sciences at Centro Universitário de Volta Redonda - UniFOA. This project aims to discuss AL and EE with the education administrator and education professionals through a continuing education.

Each article and book was reviewed through an integrative review.

A questionnaire was developed for the purpose of verify with education administrators the understanding and the applicability of the transversal competences in AL in their schools. When it was observed a gap during the analysis of the results from questionnaires, educational podcasts were created in order to show the importance of EE and to make suggestions for those who want to work with this subject in an interdisciplinary way. A workshop for education administrators and education professionals was organized, and its events are: Some specific workshops on legislation; the importance of the discussed topics; their interdisciplinarity; among others. After the Workshop, a questionnaire for product validation was distributed.

It is necessary to emphasize the importance of education professionals' training programs, highlighting the education administrator, considering that all actions / decisions and possible pedagogical and / or administrative changes, start with him/her.

The idea of offering this training through a workshop had the objective of making it more dynamic and pleasurable, considering that it proposed moments of interaction and *Let's get to work* times (actively engaging the participants), and it all allowed the participants to exchange and share experience and knowledge.

Those are techniques that can be used at any other time and place, if they are adapted according to the practices and needs of the target audience.

Feel free to use them!

1. BACKGROUND

Information and communication technologies can collaborate with global influence and equity in education, the peculiarity of teaching and learning and professional progress.

However, Moran (2001) states that,

> teaching with new technologies will be a revolution if we simultaneously change the traditional teaching paradigms in which teachers and students are kept apart. Otherwise, we will be able to bring something new and modern, keeping the essentials (p. 28).

According to Moran's ideas, It can be inferred that through ICT (Information and Communication Technology) there is an expectation of adjusting the harmony between those involved, and it expands people's relationships and extend the viability of inserting individuals through information, what provides a new praxis.

Assis et al. (2010, p. 2) define a Podcast "in general, as an audio program, and its distribution format is what differentiates it from a traditional radio programs and even from audioblogs and others [...] ", it can expand relationships, when information and / or instructions are disseminated and accessed through them.

Their use are practical and easy, considering that they can be accessed from mobile devices and computers, and it is possible to control when and where the access will be made, this is a software that is being used quite often nowadays.

The pedagogical events are the opposite. In this case, workshops need a specific place to be organized.

These workshops are an opportunity to experience concrete and relevant events, and they are structured in three aspects "feel-think-act". They are also determined as an excellent environment for building knowledge in an active way, and

still considering the theoretical approach. (PAVIANI; FONTANA, 2009; MARTINS et al., 2011).

The workshops have specific moments to encourage the participants to interact. This is exactly what Paulo Freire (2016) believe when he affirms that pedagogical workshops are dynamic spaces where knowledge can be generated and, through dialogue, it is possible a creativity and collaborative learning, and it can change the world. The pedagogical workshops are marked as a spontaneous time / space exchanges of experiences and building relationships that seek, as a learning strategic / technique, the logic of thinking, feeling and acting, and it promotes, in the group, the study of the reality and facilitates the building of a community knowledge.

2. TARGET AUDIENCE

2.1. PODCAST'S TARGET AUDIENCE

The target audience, the listeners of the podcasts, are education professionals, as well as education administrators.

However, podcasts can be created as a pedagogical support material for teachers to use in their classes.

2.2. WORKSHOP'S TARGET AUDIENCE

Education administrators, pedagogical employees and teachers in general are the target audience for this workshop.

2.3. OBJECTIVES

2.3.1. Podcast's objectives

The podcast allows a quick and easy access to information and instructions about AL and EE.

It also suggests ways to work with AL and EE in an interdisciplinary way in schools.

2.3.2. Workshop's objectives

Discuss and expand the concept of AL and EE with education administrators and education professionals, through continuing education.

3. PRODUCING PODCASTS

3.1. RECORDING THE PODCAST

The podcasts used in this project were recorded in the radio at Centro Universitário de Volta Redonda - UniFOA, with the colaboration of the Journalism course from the same Institution. It also was possible through the Projeto de Iniciação Tecnológica number 87260.

In the UniFOA radio laboratory practice, the main methods used were the production, script, editing and hosting and publishing platforms. The audio editing software used in the production process was Adobe Audition, which allows the creation and editing of radio material. We used the project website and the most famous music platforms. The Anchor application gave us support to promote the podcast, in order to grow our audience.

Podcasts can also be recorded on a mobile device and on computers, but the quality will not be the same.

3.1.1. Equipment and resources used to record podcasts

The equipment used to produce the podcasts developed in this project were those already available in the radio: Mixing console; microphones; headphones; computers; audio editing software.

A different number of people were present during the recording of the podcasts. Considering that 1 operator and 1 moderator were present in all the recordings.

According to the topics, we had four guests, and they were on the radio at different times. One of them was an external guest and the other three were professors at the institution.

However, it is worth mentioning that, if the individual appropriates and integrates the proposed topics, the same person can record several podcasts with different topics.

3.1.2. Podcast Length

Considering the target audience, people with many activities and their need to move from one building to another, it was chosen a 15 - 45 minute range per episode.

3.1.3. Podcast Script

Scripts were written according to the topics of each episode (Tables 1, 2, 3 and 4).

Table 1 - Script 1 – Giving details regarding the workshop location

Podcast Script	
This podcast is the final project submitted in the Professional Master's Degree in Teaching Health and Environmental Sciences at UniFOA, and its objective is to promote the Sala Verde Paraíba do Sul.	
Topic	In this episode we will have Prof. Ana Carolina Callegário, Ph.D., as a guest. She is currently coordinator of the Sala Verde Paraíba do Sul, and she will talk about the room with us.
Segment 1 Carol and I	* Prof. Carol, can you tell us about Sala Verde Paraíba do Sul /UniFOA? * What is the purpose of the Sala Verde? * Prof. Carol, is the Sala Verde Paraíba do Sul open to visitors from our community? * How can visitors reach the room? * How can this room help the local community? * Can Sala Verde go to schools? * How can teachers or education professionals apply to receive the Sala Verde in their schools?
Vignette	Insert a short audio about the Sala Verde Paraíba do Sul.
Conclusion	Acknowledging the guest participation and inviting listeners to visit the Sala Verde Paraíba do Sul / UniFOA - Três Poços campus. This podcast will be available with the rest of them on our website:

Table 2 - Script 2 – Why is it important to know some environmental legislation?

Podcast Script	
This podcast is the final project submitted in the Professional Master's Degree in Teaching Health and Environmental Sciences at UniFOA, and its objective is to promote the Sala Verde Paraíba do Sul.	
Guest	In this episode our guest if the professor….
Objective	Raise awareness, stimulate, and promote environmental legislation
Topic	Environmental legislation
Segment 1 **Some Legislation**	* Professor…, can you list what environmental laws and regulations, education administrators and education professionals should be aware of? * Why do you think it is important for educational institutions to be concerned about these laws?
Vignette	Insert a short audio with instructions about environmental legislation.
Segment 2 **Promoting the Legislation**	* Professor…., the Federal Constitution of Brazil states in its Article 225 that: "All have the right to an ecologically balanced environment. which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations. Paragraph 1 - In order to ensure the effectiveness of this right, it is incumbent upon the Government to: VI - promote environment education in all school levels and public awareness of the need to preserve the environment." (Environmental Education in the Constitution of the Federative Republic of Brazil - 1998), Should it be implemented in all segments of education? * In your opinion, does this environmental education awareness process also involve knowing this legislation? * How do you think these laws should taught and disseminated in schools?
Conclusion	Acknowledging the guests participation and promote the next podcast. This episode will be available with the rest of them on the EcoMídias website.

Table 3 - Script 3 - EE in schools, what the legal documents suggest and the gap in the implementation.

Podcast Script	
This podcast is the final project submitted in the Professional Master's Degree in Teaching Health and Environmental Sciences at UniFOA, and its objective is to promote the Sala Verde Paraíba do Sul.	
Guests	In this episode our guests are Prof. Dimitri Alves, Ph.D. and Prof. Ana Carolina Callegário, Ph.D..
Objective	Raise awareness, stimulate, and promote the importance of the Environmental Education in schools, which are considered one of the best ways to reach it.
Topic	EE in schools
Segment 1 **Dimitri and I**	* Professor Dimitri, do you agree that it is important to teach EE in Schools? * Why? * Are there any challenges faced during its implementation in schools? * What are your experiences on the subject, both as a teacher and as an education administrator in a state-run school?
Vignette	Insert a short audio with instructions about EE in schools.
Segment 2 **Carol and I**	* Professor Ana Carolina, as coordinator of both the Environmental Engineering Course at UniFoa and the Sala Verde, do you agree that EE should be promoted in all segments of education, as required by law? * Why? * How can Environmental Engineering and Sala Verde help to cultivate this awareness in schools?
Vignette	Insert a short audio with instructions about EE in schools.
Segment 3 **Dimitri, Carol, and I**	* Can we relate events like World Water Day, World Environment Day, Earth Day, among other annual events, with EE? * Why? * So, can we conclude that EE is something bigger and more complex, but since those events are highlighted by media, they are easier to extend the call, also to the external community? * In your opinion, what is still missing in schools in order to get EE implemented?
Conclusion	Acknowledging the guests participation and promote the next podcast. This episode will be available with the rest of them on the EcoMídias website.

Table 4 - Script 4 – Active Learning Methodologies as a strategy to implement EE in a pleasant, playful and interdisciplinary way.

Podcast Script	
This podcast is the final project submitted in the Professional Master's Degree in Teaching Health and Environmental Sciences at UniFOA, and its objective is to promote the Sala Verde Paraíba do Sul.	
Guest	In this episode, our guest is Professor and Doctoral Student Sandro Ribeiro.
Objective	Point that active learning methodologies can be one of the great allies for the implementation of EE in schools.
Topic	Active methodologies and environmental education
Segment 1 **Concepts** **Classifications**	* Professor Sandro, with your great experience in active learning methodologies, could you define them in a few words? * Are active learning methodologies still considered a taboo by some education professionals? Why? * What kind of active learning methodology would you recommend for those professionals who are seeking a new meaning in their classes? Could you elaborate on your recommendation?
Vignette	Insert a short audio with teachers' testimonials who have already used some type of active learning methodology.
Segment 2 **Active learning methodologies and Environmental Education**	* Professor Sandro, once again you have the important mission to teach step-by-step the Mathematics teachers how they can include Environmental Education in their positive and negative numbers classes, as well as in the whole and fractional numbers ones through one of the active learning methodologies. * Professor Sandro, our listeners must be thinking: "It's easier said than done ... He'd think differently if he were in the classroom with 30 ... 35 students talking and walking around", what do you have to say for those who have this feeling right now?
Vignette	Insert a vignette to promote Professor Sandro Ribeiro's Active Learning Methodology courses.
Conclusion	Acknowledging the guest participation and promote the next podcast. This episode will be available with the rest of them on the EcoMídias website.

3.2. RELEASING THE PODCAST

These are podcast partnerships with second semester students from UniFOA's Publicity and Propaganda course, as well as with the Journalism one. The students are all related to the Programa Institucional de Bolsas de Iniciação Científica e de Inovação Tecnológica (PIBIT - a technological initiation program), and the project register number is 87260.

The Podcasts are hosted on two platforms: *Spotify*, available at: https://open.spotify.com/show/5WbWbamrn9mEAX6qRsBbQd, and *Anchor*, available at: https://anchor.fm/dashboard (Figures 1 and 2).

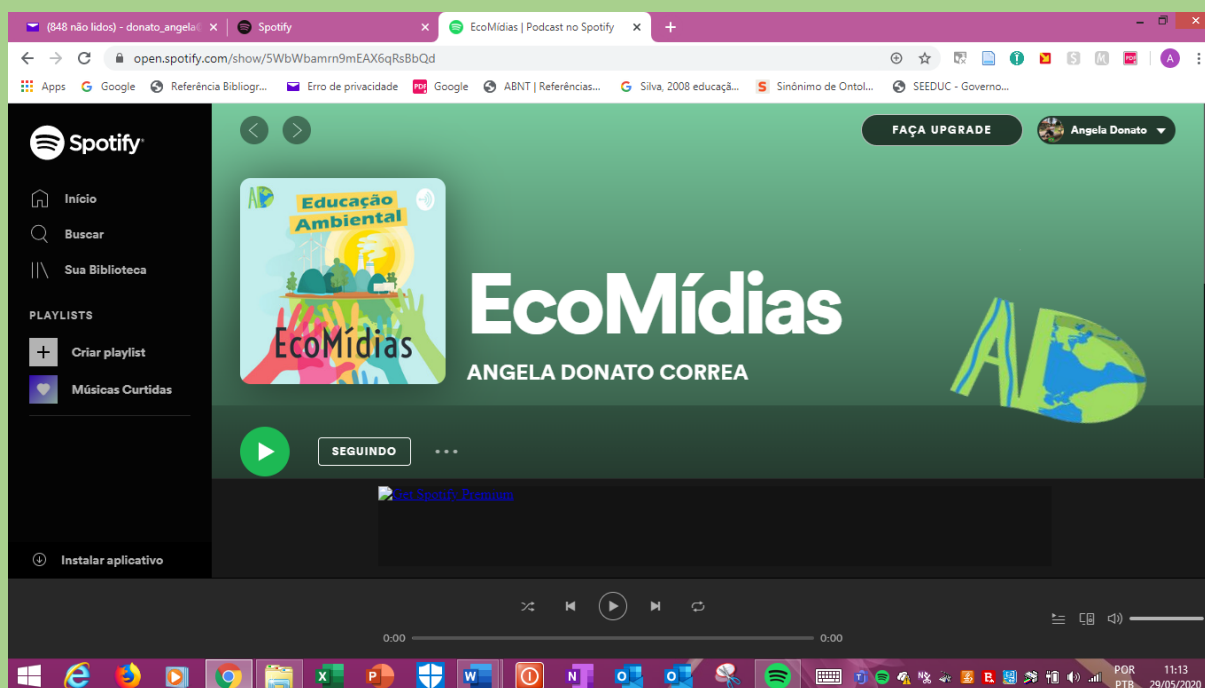Figure 1 - Caption for a screenshot created by the author showing the podcasts hosted on S*potify*

Figure 2 - Caption for a screenshot created by the author showing the podcasts hosted on Anchor

It is written on the podcasts' cover art the word EcoMídias, which is related to the Environmental Education medias. (Figure 3)

Figure 3 – The Environmental Education Podcast cover designed for the project
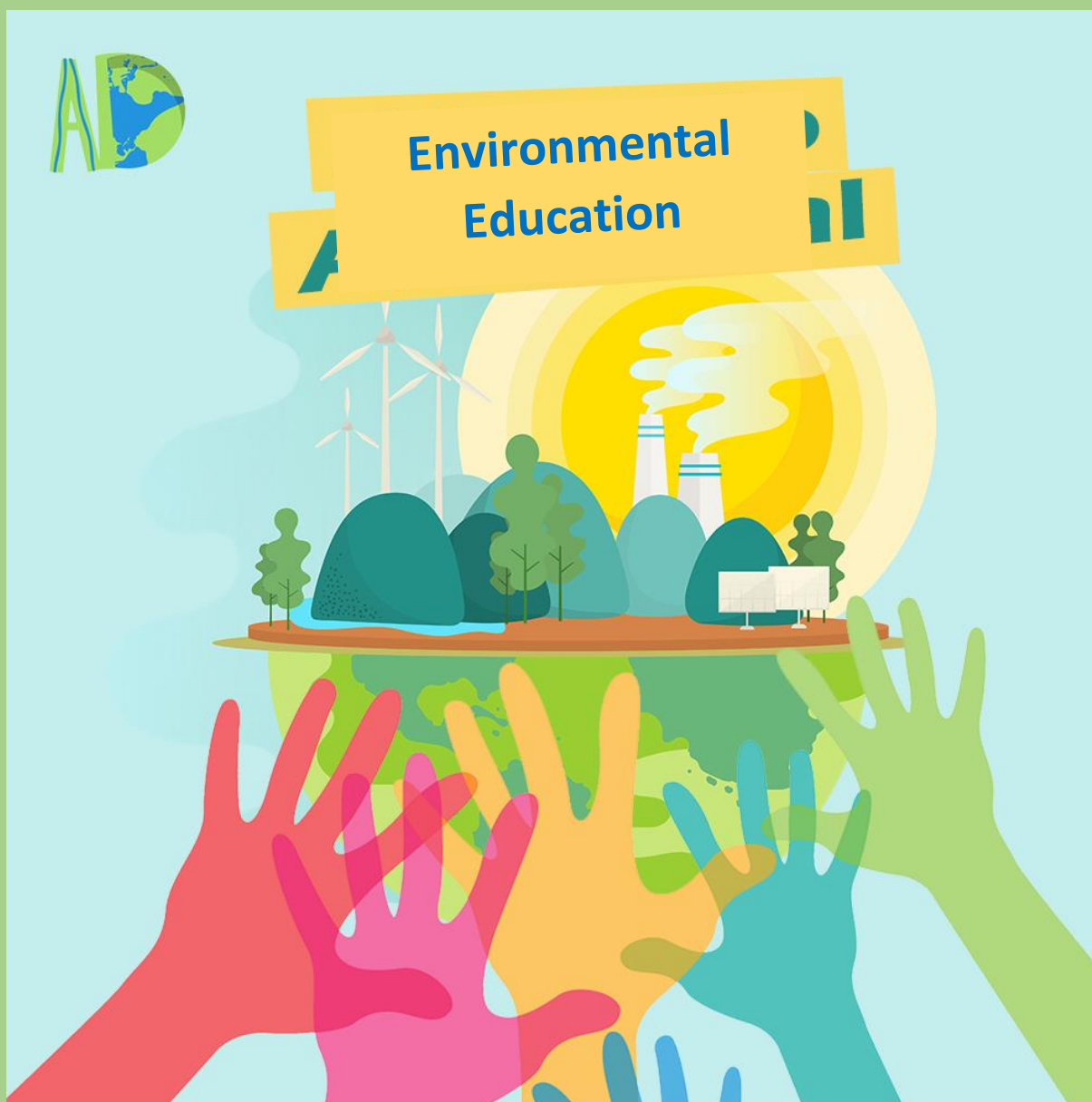
4. CONDUCTING THE WORKSHOP

4.1. WORKSHOP LOCATION

The workshop took place at Sala Verde Paraíba do Sul, located at UniFOA. That was the right choice because the room was an appropriate place according to the workshop topic and the target audience.

It is suggested, if possible, that this workshop should always be held in a place where it is already reserved for (re)thinking about EE actions. A wide and well-ventilated area.

4.2. EQUIPMENT AND RESOURCES USED IN THE WORKSHOP

Some resources used in the workshop were available in the Sala Verde: projector, computer, tables, chairs, flip chart, pencil, pen, whiteboard marker, A4 paper, 40kg paper, internet connection.

For the active learning methodology workshop, it was necessary four extra laptops with internet connection.

4.3. NUMBER OF PARTICIPANTS

We had 12 participants in the workshop, including teachers and education administrators.

The maximum number of participants in the workshop is 20, and that is an optimal number since everyone can contribute with their personal opinions and ideas.

4.4. WORKSHOP DURATION

It will be 8-hours continuing education workshop, and it can take place in a single day and / or into two mornings.

4.5. WORKSHOP TOPICS

The workshops discussed topics must be chosen according to the education level of the target audience and to the area where it will be held. You can see the workshop topics developed to this project in the table 5.

Table 5 – List of workshop topics

Topics	Characteristics	Length
Environmental Education	Some Laws - Law 9795/99 - National Environmental Education Policy - Article 1. - Law 6,983 / PNMA - National Environmental Policy - Article 2, Paragraph X. - Rio-92 or ECO-92 - implementation of Agenda 21 - PRONEA - Three Components: (A) Training for Managers and Educators (B) Development of educational initiatives (C) Development of Instruments and Methodology In 1999 Brazil developed a National Policy for Environmental Education (PNEA) – Federal Law no 9,795, cap.1. Article 1; PCN – 1997, p. 197; DCN – 2012, article 8, p. 03; BNCC – 2017.	2 h
Focus on Legislation	Awareness Let's get to work	40 min
EE in the school	Reflection - How important is EE in your school?	30 min
Interdisciplinary EE Project – A scope	The education administrator, the EE and the Interdisciplinary Planning. Let's get to work	2 h

Topic 1 – **Environmental education** focuses on some legislation because they are frequently related to the educational sector. They are Federal Legislation, and some are state laws, what will demand an adaptation according to the state and/or

municipality where the workshop takes place. Those laws need to be constantly updated, if necessary.

Topic 2 - **Focus on Legislation**. This is the moment when, after they had access to laws that explained the EE and how it should be implemented, two of the laws that are considered most important are chosen, to raise awareness through their dissemination in the schools, with the objective of drawing other professionals involved in the teaching-learning process attention, what initiated a discussion about it in schools.

Topic 3 – **EE in the school**. The participants are invited to take an imaginary tour of their schools and write, in one sentence, why is EE important in their schools?

Topic 4 – **Interdisciplinary EE Project scope**. After they had access to legislation, reflected on how to raise awareness among the staff and discussed about the importance of EE in their schools, the participants, with the support of the moderator, define the scope of the interdisciplinary EE project, which will be taken to their schools and it will be available for contributions and adjustments there. It also can contribute to the school's PPP (Political-Pedagogical Project).

4.6.   THE WORKSHOP SCRIPT

Workshop - "studying environmental education from an interdisciplinary approach"

The workshop topic is: The importance of AL and EE and their promotion in schools.

Time: 8:00am - 4:00pm

Date: to be announced

Local: to be announced

✓ 8:00am - 8:30am – Arrival/Registration.

✓ 8:30am - 8:45am – Opening, Welcome and Instructions

- ✓ 8:45am - 10:30am – Environmental Education- Law 9795/99 - National Environmental Education Policy - Article 1. - Law 6,983 / PNMA - National Environmental Policy - Article 2, Paragraph X. - Rio-92 or ECO-92 - implementation of Agenda 21 - PRONEA - Three Components: (A) Training for Managers and Educators; (B) Development of educational initiatives; (C) Development of Instruments and Methodology. - In 1999 Brazil developed a National Policy for Environmental Education (PNEA) – Federal Law no 9,795, cap.1. Article 1; PCN – 1997, p. 197; DCN – 2012, article 8, p. 03; BNCC – 2017.
- ✓ 10:30am - 10:50am – Break
- ✓ 10:50am - 11:30am – Focus on Legislation - Awareness - Let's get to work
- ✓ 11:30am - 12:00pm – *Podcast* – The importance of EE in schools
- ✓ 12:00pm - 12:30pm – **Reflection Time:** How important is EE in your school?
- ✓ 12:30pm - 1:30pm – Lunch Break
- ✓ 1:00pm - 3:00pm – Education administrator - EE and Interdisciplinary Planning - Creating the Interdisciplinary EE Project for the School - Let's get to work
- ✓ 3:00pm - 3:30pm – *Podcast* - The EE with a transdisciplinary perspective - Testimonials
- ✓ 3:30pm - 3:50pm – Workshop Feedback
- ✓ 3:50pm - 4:00am – Closing Remarks

5. CONCLUSION

This project involved two different tools: Podcast and Workshop.

The podcast was used because it can transmit information, instructions, and knowledge. Portability is one of its advantages. You can take the podcast with you and listen whenever or wherever you want, and they are available on mobile devices, personal computers, and tablets. They are also a smaller size file compared to the other medias.

Therefore, this teaching methodology is not only practical but also agile, and this is essential considering that education administrators and other education professionals are often too busy with work, consequently they can select to listen what is interesting for them.

The reason why we opted to use the podcast in the project, is in accordance with what Aitchison (2009, p. 49) states "(...) the human echoic memory is stronger than the iconic, olfactory or haptic memory". This explain the podcast use, considering that listeners learn information, instructions and legislation promoted through this media, and they are able to use that as a reference and a new (or not) way of understand, act and inter(act) with the Environment and the EE.

On the other hand, the Workshop was chosen based on its dynamic configuration. It is a training tool, practical and easy to simulate real experiences, and it is suitable for the target audience, who are the education administrator and other education professionals. The pedagogical workshops are marked as a spontaneous time / space exchanges of experiences and building relationships that seek, as a learning strategic / technique, the logic of thinking, feeling, and acting. It also promotes, in the group, the study of the reality and facilitates the building of a community knowledge.

This is exactly what Paulo Freire (2016) believe when he affirms that pedagogical workshops are dynamic spaces where knowledge can be generated and, through dialogue, it is possible a creativity and collaborative learning. And it can

change the world. His beliefs understand the education as a way of emancipate individuals, writers of their own trajectories (CARVALHO, 2004).

      This project tries to promote a new perspective to set the benchmark for how human beings understand that the environment demands a more balanced approach, and that is what participants can expect to learn during the event.

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