

1<sup>st</sup> INTERNATIONAL CONFERENCE OF FEE ECOCAMPUS Getting Higher Level Education Climate Ready 26-27th April 2024

### THE IMPORTANCE OF PARTICIPATING IN THE ECO-SCHOOLS PROJECT AS AN INSTITUTION FOR TRAINING EDUCATORS AND TEACHERS

Teresa Lopes, Joana Torres and Rosa Martins









"The collective activities of human beings have altered the earth's ecosystems so that our very survival seems in danger because of changes more difficult to reverse every day. To contain global warming before it reaches catastrophic levels means addressing environmental, social and economic issues in a holistic way."

UNESCO in: https://www.unesco.org/en/sustainable-development/education

# Introduction

At a crucial time in the defense of life and biodiversity on our planet, in which we are already experiencing the consequences of climate change, this is the time to act as a community.

Today we understand that to reverse the dramatic situation that the planet is experiencing, it is necessary to train sustainable and environmentally conscious citizens to act in and as a community.

In Portugal the Eco-Schools Program is developed by ABAAE (Blue Flag Association for Environment and Education) and it is integrated into the international program of FEE (Foundation for Environmental Education).



"Learning about sustainable development can help young people understand the needs and rights of present and future generations, and to consider the best ways to tackle interrelated challenges such as climate change, inequality and poverty. It can also motivate learners to want to change things for the better equipping them with the skills, knowledge, understanding and values that are crucial to envisaging and creating a sustainable society and future."

(Qualifications and Curriculum Authority, 2009, p. 9)

### **Environmental Education and Education for Sustainable Development**

Several international conferences have produced documents that have highlighted the importance that Higher Education Institutions assume in promoting Environmental Education and Education for Sustainable Development (Leite & Dourado, 2015).

These documents suggest that they should, on the one hand, develop research in these areas and, on the other, integrate these themes into their study plans. (UNESCO, 1997).

Citizens must be prepared to deal with problems on this topic and contribute to their resolution and this preparation requires an Education capable of providing citizens with the necessary knowledge to make the best options for resolving these problems (UNESCO, 2008).



### **Environmental Education and Education for Sustainable Development**

- Environmental Education and Education for Sustainability are particularly important in the training of teachers and educators because they are responsible for shaping new generations.
- It is crucial that future teachers and educators embrace ecological values and acquire skills and practices so that they later become agents of change in their educational communities.
- The Eco-Schools Program is an effective tool for promoting environmental education in an integrative way, not only within the educational community but also in society in general.
- The Eco-Schools Program is a tool to develop in our students attitudes and values that they should develop with their own students and in the community.



## **Our Institution: IEES**

The ESEF, integrated into the European Institute of Higher Studies (IEES), has promoted the Eco-Schools Program since the 2021/2022 academic year, and it has been awarded the Green Flag in the last two years.

IEES, as a Higher Education institution, has been making a great effort to become an Eco-Campus.



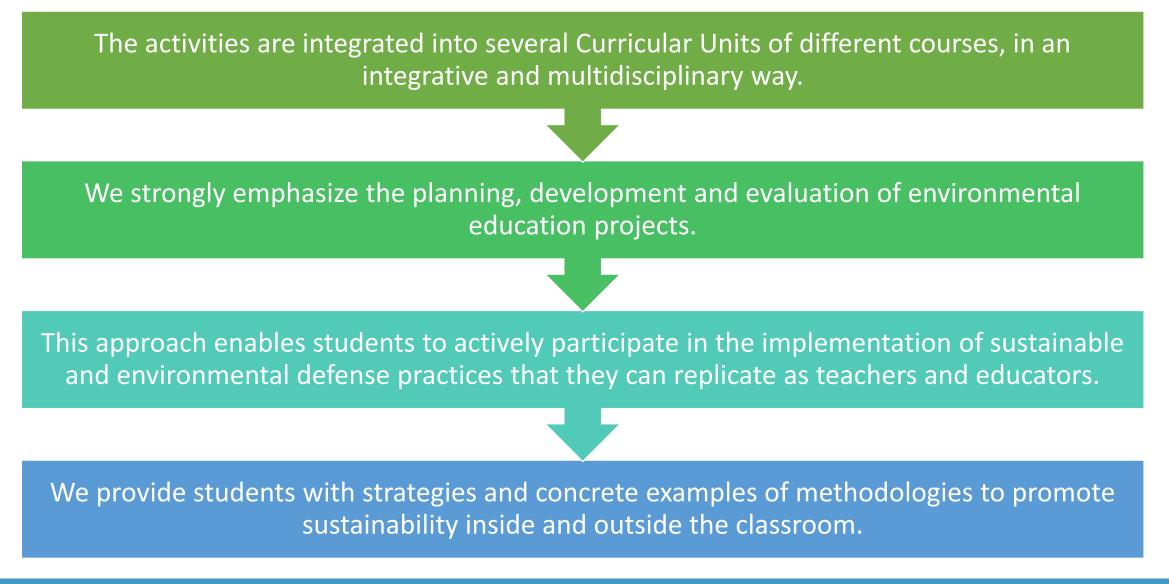
We intend the Eco-Schools Program to be participated by everyone in our school.

The Eco-Schools Program's activities are integrated into several Curricular Units of different courses. Some examples are:

Course	Curricular Unit	Year/Semester
Degree in Basic Education	Bioecology	2nd year/4th semester
Degree in Social Education	Environmental Education	2nd year/3rd semester
Master's degree in Preschool education and Primary Education	Ecology and Education for sustainability	1st year/1st semester



### **Eco-School Program**







#### Clean Project – Girls Scouts.





Insect Hotel – 2nd grade students.



Project developed by the students of the Master's degree in Preschool education and Primary Education – waste separation and decomposition time.







Project developed by the students of the Master's degree in Preschool education and Primary Education – consequences of fire in soils and the relevance of saving water.



SALSA

Utilizada como tempero de imensos pratos. É usada em sopas, molhos, pratos de came, de peixe, de marisco, omeletas e massas.

MANJERICÃO

O manjericão é versátil. Saladas e omeletes combinam especialmente bem, mas também pratos de aves.

ALECRIM

O Alecrim combina na perfeição com carne de porco e aves, em assados de peixe, de carneiro, cabrito e vitela, em batatas assadas e linguiças. Pode ser utilizado ainda em molhos e grelhados.

HORTELÄ

Utilizada preferencialmente fresca e crua para aroma e sabor mais intensos. Doces, chás, infusões, batidos, sumos, rebuçados, saladas, massas, tofu, seitan e assados de carne.

Activities (some examples)

Project developed by the students of Social Education – aromatic herb garden and poster with aromatic herb information. COENTROS

Frescas ou secas, dão um toque aromático e um sabor delicioso. A folha fresca é amplamente utilizada em alguns molhos misturados ou marinados. Para decorar pratos e como condimento em cremes e sopas.



Project developed by the students of Primary Education – nest houses.

Project developed by the students of the Master's degree in Preschool education and Primary Education – air quality.



21 de mar. de 2023

#### IEES com qualidade de ar boa!

A qualidade do ar é essencial para que vivamos num ambiente saudável, já que a poluição atmosférica tem consequências graves na saúde dos seres humanos, levando ao desenvolvimento e exacerbação de doenças respiratórias, tais como: asma, doença pulmonar obstrutiva crónica e cancro do pulmão, mas também de doença cardiovascular. Embora, na última década, tenha havido redução de emissões de poluentes atmosféricos e se tenha verificado uma melhoria da qualidade do ar, de uma forma geral, na Europa e, em específico, em Portugal, a poluição atmosférica continua a atingir níveis nocivos para a saúde humana e para a biodiversidade, sendo, assim, importante aferir a qualidade do ar na zona onde vivemos e estudamos.

Neste contexto, no âmbito da Unidade Curricular de Ecologia e Educação para a Sustentabilidade do 1º semestre do 1º ano do Mestrado em Educação Pré-Escolar e Ensino do 1.º Ciclo do Ensino Básico, realizou-se um estudo cujo objetivo foi aferir a qualidade do ar na área exterior do Instituto Europeu de Estudos Superiores (IEES) através da utilização de líquenes como bioindicadores.

Os bioindicadores são espécies, grupos de espécies ou comunidades biológicas cujas presenças, abundância e condições são indicativos biológicos de uma determinada condição ambiental.

Os líquenes são organismos resultantes de uma relação simbiótica (relação biótica obrigatória para a sobrevivência, na qual todos os seres vivos envolvidos saem beneficiados) entre fungos e algas verdes ou cianobactérias. Como os líquenes mostram alta sensibilidade a poluentes atmosféricos por meio de mudanças populacionais como

https://www.fafetv.com/post/iees-com-qualidade-de-ar-boa



## Conclusions



The implementation of these projects has shown great acceptance and a very positive impact on the target audience.

The aim for these students is to develop skills, attitudes, and core values that they will carry throughout their lives.

This approach will enable future teachers and educators to prepare new generations more aware of and committed to preserving the environment and promoting sustainability.



### References

- Leite, L. & Dourado, L. (2015). Educação ambiental e para o desenvolvimento sustentável na formação de graduados em educação. Comunicações, 2(2), 285-307.
- Qualifications and Curriculum Authority (2009). Sustainable Development in Action: A Curriculum Planning Guide for Schools, Londres, Qualifications and Curriculum Authority.
- UNESCO (1987). Report of the World Commission on Environment and Development: Our Common Future, United Nations.
- UNESCO (2008). Educação de qualidade, equidade e desenvolvimento sustentável, United Nations.

