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Education for sustainable development (ESD) in the Greek education system

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Climate change;
environmental education;
Greek educational system;
sustainability.

Abstract

The ecopedagogy movement challenges educators to critically engage, cultivate and appreciate human beings as collective and communal potentials in the struggle to achieve convivial life on Earth (Kahn, 2010). "As a form of critical theory of education, ecopedagogy can work at a meta-level to offer dialectical critiques of environmental education and education for sustainable development" (Kahn, 2008, p. 9). This article examines the implementation of Education for Sustainable Development (ESD) in secondary schools in Greece (Table 1), via a literature review and interviews with educators from secondary schools in Greece.

More particularly, this paper refers to the challenges and the needs of the Greek educational system to foster sustainable development education in the educational curriculum, providing contemporary education approaches for its integration. It also aims to reinforce global awareness of the environmental challenges and needs of our times, providing ideas that stakeholders and the government can use to act for a better environmental future.

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Introduction

This paper refers to the challenges and the needs of the Greek educational system to foster SDE in the school curriculum. It also aims to reinforce global awareness of the environmental challenges and needs of our times and provide proposals that stakeholders and the government can elaborate on for a better ecological future. ESD is an important part of ecopedagogy:

> Ecopedagogy also maintains a critical relationship to the ongoing UN-sponsored Decade of Education for Sustainable Development (2005-2015). Ecopedagogues hope to utilise education for sustainable development to make strategic interventions on behalf of the oppressed, but ecopedagogy also attempts to generate conscientisation upon the concept of sustainable development proper and thereby uncloak it of the sort of ambiguity that presently allows neoliberal economic planners in either their aggressively imperialist or Third Way economic/political variants to autocratically modernise the world despite the well-known consequential socio-cultural and ecological costs (Kahn, 2008, p. 9).

The methodology employed is a review of articles using keywords like 'sustainable education', 'Greek educational system and climate change', 'climate change and global actions and activities (EU, UN, Unesco) to support education for sustainable development', 'ESD-schools in Greece'. Additionally, the author interviewed two educators from secondary schools in Greece, which took place on the phone in December 2022.

The research questions used for the interviews follow:

1. Are climate change and sustainability included nowadays in the school curriculum?

2. Are educators of secondary schools in Greece able to propose activities and discussions concerning climate change and sustainability while in the classroom?

3. Are there any specific educational programmes (seminaries or others) for educators in Greece on climate change and sustainability, and if there are, what are the educators' views about them?

Data was collected through semi-structured interviews that took place on the phone. The participants were two Greek secondary school educators. Their involvement in the study was voluntary, based on their available time and willingness to participate. They were informed about the interview's purpose, how it would be conducted, the estimated length of time, and the confidentiality of the responses. Informed consent was obtained from every participant. A semi-structured interview guide was developed with the above three questions that explored the education for sustainable development (ESD) in the Greek educational system.

The interviews were conducted in December 2022, and the participants were requested to respond by referring to their personal experiences from ESD in their school. Interviews lasted between 15 and 20 minutes and were conducted by the author of this study. The discussions were audio-recorded, transcribed verbatim and checked to ensure accuracy.

The author analysed the transcripts using the inductive thematic analysis based on the guidelines suggested by Braun & Clarke (2006). The author read the transcripts several times in order to generate the initial codes, then transformed them into potential themes and subthemes and clustered them. To present the findings through quotes and maintain the responders' confidentiality, participants were coded as Educator 1 and Educator 2.

The literature review offered a useful framework to understand if and how ESD is practised in the Greek educational system. At the same time, the interviews helped the author understand if sustainable development is a theme that teachers are able to address while in the classroom, their 'tools' to do so and their view in general about the actual situation.

Why should we include ESD in school curricula?

Climate change is one of the greatest dangers of humankind, putting the planet Earth and human life at risk.

> As a form of critical theory of education, ecopedagogy can work at a meta-level to offer dialectical critiques of environmental education and education for sustainable development as hegemonic forms of educational discourse that have been created by state agencies that seek to appear to be developing pedagogy relevant to alleviating our mounting global ecological crisis (Kahn, 2008, p. 9).

The need for sustainable development and practices makes it crucial for educators to increase awareness about these issues. The innovation of pedagogical approaches, tools and learning activities is needed for children and adults to adapt concepts of sustainability and climate change in personally and collectively meaningful ways (Daskolia et al., 2015).

> Education for sustainable development (ESD) is expected both to make people more aware and better qualified to take part in shaping future developments responsibly and to raise their awareness of the problems related to sustainable development and bring forth innovative contributions to all economic, social, environmental and cultural issues (Barth & Rieckmann, 2016).

> Education for Sustainable Development means including key sustainable development issues into teaching and learning; for example, climate change, disaster risk reduction, biodiversity, poverty reduction, and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners

to change their behaviour and take action for sustainable development. Education for Sustainable Development consequently promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way (UNESCO, 2015).

Developing and integrating environmental perception in children at an early age should be a priority in order to provide them with the awareness and the skills to be able to solve emerging problems (Ertekin et al., 2014). But most importantly, it is educators, parents, and society as a total that should become the example for children and other people to engage and participate in environmental protection.

Empowering and mobilising young people of all genders is central to ESD implementation (UNESCO, 2020). UNESCO (2020) stages a worldwide effort to foster education for sustainable development, explaining that to shift to a sustainable future, we need to rethink what, where and how we learn to develop the knowledge, skills, values and attitudes that enable us all to make informed decisions and take individual and collective action on local, national and global urgencies.

By educating citizens, especially young generations, within the formal schooling system, the hope has been to effectively address the issue of SD (Bonnet, 1999). Higher education for sustainable development (HESD) means to enable participants to acquire and generate knowledge, but also to reflect on further effects and the complexity of behaviour and decisions in a future-oriented and global perspective of responsibility (Rieckmann, 2011).

Saylan and Blumstein (2011) argue for a paradigm shift in the way we view education as a whole, explaining that our educational system can create new levels of awareness and work toward a sustainable future, including environmental education as a part of the curriculum, which for Greece is the issue many years now.

ESD and the Greek education system

UN goals and targets for 2030 and, more particularly, target 4.7 (United Nations' 2018 Sustainable Development Goals 4. Quality education goal, target 7), describe the urgency to engage educational systems around the world, explaining that by 2030 we should ensure that all learners acquire the knowledge and skills needed to promote sustainable development: through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development. Nevertheless, little has been yet done to achieve such goals. The United Nations (UN) reported little empirical evidence of relevant change regarding pedagogical approaches, especially in early childhood education (Bascopé et al., 2019).

The Greek education system is divided into primary (6-12 years old), secondary (12-18 years old) and tertiary studies (18 + years old) (Table 1). Environmental education within the Greek education system has no clear institutional framework, and the state seems to have a dual role of exploiter and protector of the environment (Kyridis et al., 2005).

Table 1: The Greek education system.

Age		Years
18 years old and after	**Higher Education** Panepistimio (after 18 years old)	
12- 18 years old	**Secondary Education** Lykio and Gimnasio	3+3 years Gimnasio (3 years) = Compulsory Education
6-12 years old	**Primary Education** Dimotiko/ Primary Schools	6 years Compulsory Education
4-6 years old	**Pre-school Education** Nipiagogeia/ Kindergarten	2 years Compulsory Education

Even if ESD can impact student outcomes in terms of their sustainability consciousness (Boeve-de Pauw et al., 2015), it does not seem to be a main concern for the Greek Ministry of Education, as our research and previous research (e.g. Kyridis et al., 2005) revealed. Results of the interviews with both educators indicate that ESD is not a main part of the Greek school curriculum. In fact, Educator 1 and Educator 2 confirmed that ESD depends on the teachers' voluntary actions and activities to inform and involve students on themes concerning ESD.

At the question, "Is climate change and sustainability included in the school curriculum in Greece?" both educators replied that it was on their personal time and in addition to their everyday programme that kept them very busy they could organise their course to include ESD activities.

To the question, "Are educators of secondary schools in Greece able to propose activities and discussions concerning climate change and sustainability while in the classroom?" the answer by both educators was that there was no time since the programme kept them busy and that there is no particular time given for children to participate in ESD activities. The existing institutional framework describes the application of environmental education as voluntary. Environmental education is proposed partially in the primary education curriculum (Greek Ministry of National Education and Religious Affairs and Pedagogical Institute, 2002). Yet, it still depends on the educators' voluntary work to be applied.

Petridou (2021), who is responsible for environmental education in Athens (sector B Athens), also clarifies that educational development in Greece is still voluntary and is not a central part of the school curriculum. She states that if environmental development was part of the curriculum; the results would lose part of their dynamism. Nevertheless, interviews with educators taken by the author showed no accordance with this view. For them, environmental education should be part of the school curriculum to be more dynamic and applicable to educators, students and other stakeholders.

The lack of suitable educational material, the strict school timetable, the teacher's lack of knowledge concerning environmental issues, and general bureaucratic problems do not help the application of ecological education in Greek schools (Kyridis & Mavrikaki, 2003; Kyridis et al., 2005). The above view was supported by both educators that the author interviewed.

Of course, going from the holistic and broad concepts of ESD to a locally relevant curriculum is not an easy process. The issues need to be relevant, understandable, and appropriate to the audience's ability to understand and create solutions (Tilbury et al., 2002).

Additionally, as Shephard et al. (2015) explain, just a course on the environment, even if this might be the case, does not seem sufficient to alter students' or adults' attitudes towards the environment. We would need continuity of actions and activities to change our set of mind (Hernes & Irgens, 2013).

Liarakou et al.'s (2011) research on secondary school Greek students' (8 – 11 years old) knowledge of the greenhouse effect and climate change suggests that students are confused about solutions and causes. The researchers describe that students' participation in environmental education programmes could be a way to help students understand and act. The research of Zerva et al. (2019) states that Greek citizens, in general, believe that the parties most concerned about taking action against climate change are environmental organisations, scientists and local citizen environmental groups and that education has little or nothing to do with it.

ESD schools consider sustainable development a main principle to keep in mind when planning the school's daily life and long-term changes and development. Such schools are increasing in number and improving in quality internationally under different names (Breiting et al., 2015). We can find more than 200 ESD-schools in Greece (see Figures 1 and 2), meaning schools that have chosen Education for Sustainable Development as a central part of their mission and educational plan. There is a site that shows the big number of Greek schools that seem to be engaged in ESD: https://aeiforosxoleio.wixsite.com/website.

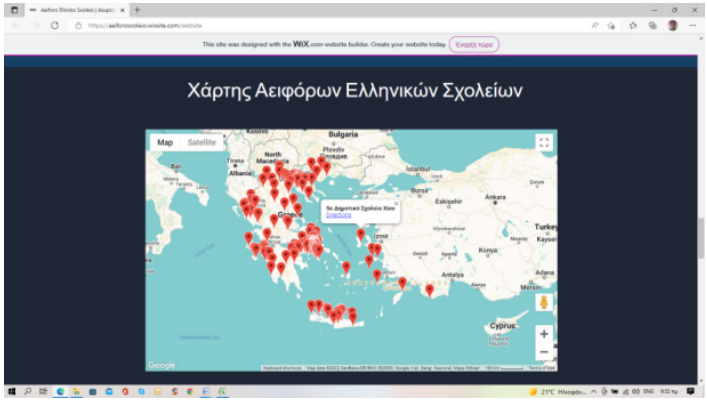

Figure 1: Map of ESD schools in Greece (Greek ESD school official site, 2023).

The official site of Greek ESD schools (Figure 1) describes a simple process for schools to participate in the ESD programme. The above fact might explain the large number of schools involved.

The official UNESCO site for sustainable development provides statistics on schools including ESD in their teaching (Figure 2). We can see that 47% of the national curriculum framework of 100 countries did not refer to climate change; 40% of teachers are confident teaching cognitive dimensions of climate change, but only 20% can explain well how to take action; 2,800 education and environment stakeholders from 161 countries adopted the Berlin Declaration on ESD; and 50 pilot countries are preparing their country initiative on ESD for 2030. There is a need, first of all, to educate educators on how to take action on ESD best and then give them the time, tools and timetable needed to exchange with students on ESD.

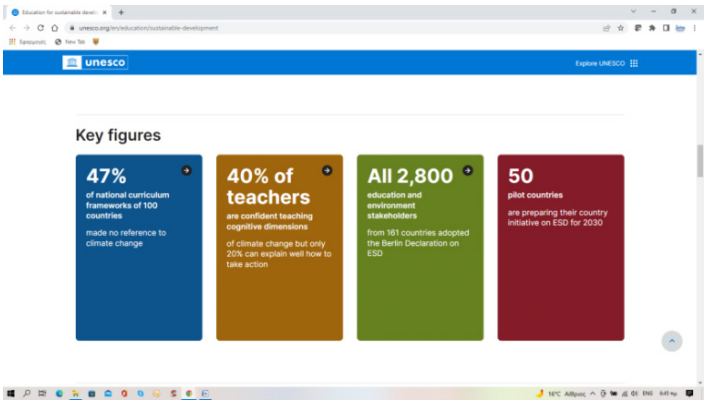

Figure 2: Key figures (UNESCO, 2023).

Europe has acknowledged the importance of adopting a participatory approach involving schools, students, teachers, teacher trainers and administrators, attaching great importance to the promotion of qualitative and action research methods and self-reflected practice ("Quality Criteria for ESD-Schools", ENSI's Comenius 3 program "School Development through Environmental Education" (SEED)). In Greece and Europe in general, environmental education is well-supported by European Union programmes (Kyridis et al., 2005).

In Greece, environmental education (EE) projects are implemented at the school level by environmental teams formed on a voluntary or elective basis that typically involves one or two teachers and a group of 20 to 25 students (Yanniris & Garis, 2018). Nevertheless, such programmes and environmental education, for some years now, have faced an uncertain future as a result of the contemporary political and economic crisis (Yanniris, 2015). Educational programmes proposed by the national framework of EE in Greece are severely affected by the global economic crisis, as we speak of loss in materials and infrastructure, loss of school and educational projects (Yanniris & Garis, 2018), which obviously cannot help the formation of teams and the evolution of environmental projects.

Greece appears to place particular emphasis on achieving sustainable development, firmly committed to implementing the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) (UNESCO, 2023). The inclusion of education is described as a high political priority, as the National Growth Strategy of Greece adopted in May 2018 (Greek Ministry of Education) is in line with the overall themes and provisions of the SDGs, including, inter alia, SDG 4 and in particular SDG 4.7 related to ESD.

Greece presented its first *Voluntary National Review* (VNR) on the implementation of the 2030 agenda for sustainable

development (160 pages) at the 2018 UN High-Level Political Forum on Sustainable Development (HLPF). One of the eight National Priorities focuses on "Providing high-quality and inclusive education", linked to SDG 4, and covers all aspects pertaining to ESD. Chapter 5.2 of the above VNR report refers to the academic and the research community, explaining that it constitutes one of the most important stakeholders, playing a crucial role in the promotion and implementation of SDGs across different scientific fields and governance levels: The academic "and research community is instrumental in raising social awareness on sustainability challenges and opportunities, to informing evidence-based decision-making and providing solutions to complex and multi-dimensional problems, to elucidating SDGs interlink ages, and to developing synergies and partnerships that share expertise and best practices to support the achievement of the SDGs".

The same report (2018) explains how the Greek Ministry of Education is promoting policies and measures at all education levels, for the integration of the basic principles of sustainable development, in line with the overall national education policy and is implementing concrete interventions at all levels of education, supported by a number of laws and ministerial acts, to this end. Most specifically, the law (4547/2018) sets the national implementation plan for ESD and has established "Centers for Education of Sustainability" (Passas, 2019).

Education for sustainability is proposed as a part of secondary school curricula (OJG A 102/12.06.2018, Article 52, Education for Sustainability). Additionally, in Greece, university and research institutes and centres are said to have been intensively working on sustainability issues and promoting SGDs, either on their own or in close cooperation with international scientific institutions, bodies and networks. This is achieved through the development of research projects, the organisation of thematic workshops, conferences and other scientific events, and the implementation of education and training programmes (Passas, 2019). There are also books in Greek on environmental education (see Fermerli et al., 2018).

Flogaitis et al. (2018) explain that quality criteria for ESD schools were translated into 18 languages, including Greek, and that they have been used for student and teacher training seminars in Greece since then. Flogaitis et al.'s (2018) research evaluates the progress of ESD in Greece using the quality criteria for ESD schools, examining the changes to the Greek education system since 2005. Although this study describes how environmental education followed a dynamic course of development throughout the 1990s, it also points out that it was taught in schools only in the form of optional extra-curricular projects, which were implemented voluntarily by teachers and students after school hours and not as a separate lesson. Additionally, the references to environmental and sustainability issues were fragmented, with no overall planning for all courses and classes, resulting in a lack of continuity and coherence (Flogaitis et al., 2018). The research of Yanniris (2015) explains that environmental education offers students multiple benefits to enhance their interest in environmental issues (82%), improve cooperation between students (79%), increase knowledge of environmental subjects (61%), reduce behavioural problems (27%), and increase participation in the school courses (24%).

Even if there seems to be a positive attitude of the Greek educational community and the Greek government toward environmental education, only 33% of the educational personnel, regardless of speciality, have implemented an environmental education project at any point in their career (Yanniris, 2015). The most common difficulties reported are the strict and inflexible school schedule (53%), funding difficulties (50%), and lack of specialised knowledge of environmental issues (48%) (Yanniris, 2015).

Unesco's *education for sustainable development. A roadmap* (UNESCO, 2020) suggests actions to advance ESD that involved stakeholders should take into account: ministries of education should review the purpose of their education systems in light of the ambitions of the SDGs and define learning objectives fully aligned with those goals. Additionally, education policymakers at local, national, regional and global levels should integrate ESD into education policies, including those that concern learning environments, curricula, teacher education, and student assessment, and always with a gender perspective in mind. Some contemporary pedagogical approaches to integrating ESD at schools are discussed in the following section.

Contemporary pedagogical approaches to integrate ESD in schools

Inter-disciplinary curriculum

More than ever, we need innovative approaches and, most importantly, actions that prepare students, adults and society to deal with environmental issues. As Breyman (1999) and Kyridis et al. (2015) have noted, if we wish to carry out environmental education, there is an urgent need to develop an interdisciplinary curriculum, which is considered essential for the existence of viable societies.

Evaluation

While education is introduced as the most efficient mechanism for changing behaviour and improving climate literacy, it is unclear how to deliver it in a way that students, teachers, and the community can benefit (Mochizuki & Bryan, 2015). The delivery of ESD should also be examined and evaluated, taking into account the age of the participants, among other things.

Even if many universities from all over the world have initiated activities to address sustainability in their teaching and learning at the course level and in the curricula, little evidence-based research is focusing on what students actually learn, which competencies they develop, and what are the learning outcomes (Barth & Rieckmann, 2016). The evaluation process, which will take place with the correct tools and by adequate persons, is also needed to understand the outcomes to be able to adapt and improve.

Quality criteria

Breiting et al. (2015) present a list of 'quality criteria' to be used as a starting point for reflections, debates and further development regarding future work on ESD among educational officials, teachers, headmasters, parents, and students with the aim to enhance the quality of education for sustainable development. These quality criteria are presented in three main groups regarding (1) the quality of teaching and learning processes, (2) the school policy and organisation, and (3) the school's external relations. The quality criteria proposal is one of the outcomes of the COMENIUS III European network 'School Development through Environmental Education' (SEED), as an example of the activities of ENSI, which is a decentralised network of national authorities and research institutions and a UNESCO partner within the UN Decade for Sustainable Development (DESD), 2005-2014, aimed at involving all countries in concrete ESD strategies, development and review (Breiting et al., 2015).

Digital storytelling (DST) activities

Digital storytelling (DST) activities in environmental education would not only lead to students becoming skilled in digital media but also provide a cultural and environmental focus for sharing knowledge and practices between generations (Wyeld et al., 2007). This could support students in understanding the natural world and acquiring environmental awareness (Heo, 2004). Theodorou et al. (2019) examined 459 students in the 4th, 5th, 6th and 7th grades in Athens. This research demonstrates the extent to which the combination of a lecture given to students about climate change concepts and a digital storytelling intervention tool named Pixton were effective in teaching climate change science. Students appeared to be more cooperative when learning was administered in a pleasant and interactive way, being part of a learning experience and creating their own content.

Project and problem-based learning (PPBL)

Project and problem-based learning (PPBL) are complementary pedagogical approaches widely used in ESD, STEM education and sustainability science. Both are action-oriented, integrating fields of knowledge (inter- and transdisciplinary) and aim at fostering the development of agency and collaborative skills among children. These pedagogical approaches engage students in real-world problems, considering them active rather than passive learners who work to find solutions (Brundiers &Wiek, 2013; Yasin & Rahman, 2011; Bascopé et al., 2019).

Gamification

The use of *gamification* can help children become active in environmental protection. Mylonas et al. (2021) refer to the Green Awareness in Action (GAIA) H2020 research project that implemented an Internet of Things (IoT)-based approach in several European schools for sustainability awareness and energy efficiency. This project also can increase students' digital skills. The use of gamification, competitions and IoT-based educational activities, as explained by Mylonas et al. (2021), helped GAIA engage directly with teachers and students in order to realise energy-saving activities in their environment. In this study, researchers report on the use of gamification and competition among schools in this context and how they helped with IoT-based lab activities to engage students and educators to participate more actively in the project. They also provide details on implementing GAIA's intervention in specific school settings to showcase their approach. Their findings, backed up by evaluation data and answers to a survey by 30 educators in Greece and Italy, confirm that the inclusion of competition and gamification aspects can significantly increase students' engagement, especially when groups/schools compete with each other. Moreover, IoT-based educational activities can supplement existing educational activities in interesting ways, with students evaluating the experience positively and educators reporting increased overall student engagement in their class during the intervention period, and, on average, better class performance than previous periods.

Transform learning environments

Transforming learning environments is essential and can be achieved by encouraging learners to become change agents with the knowledge, means, willingness and courage to take transformative action for sustainable development. Educators, learners, and administrative staff should cooperate with community-based local leaders, families, as well as non-governmental and private sector actors working for sustainability in order to engage the local community as a valuable setting for interdisciplinary learning activities (UNESCO, 2020).

Vaughter (2016) explains that effective policy related to climate education requires a commitment to teach, learn and act. The author proposes the creation of learning environments in which students can practice action competence in responding to climate change while minimising policies that contradict the content of climate change curriculums. Curricular approaches that attempt to bridge knowledge and action on climate change may lack legitimacy in the eyes of students, their families, and the community if schools themselves are perceived as contributing to the problem through their practices (Vaughter, 2016). Transforming all aspects of the learning environment through a whole institution approach to ESD can enable learners to live what they learn and learn what they live (UNESCO, 2020). This is why UNESCO proposes employing interactive, project-based, learner-centred pedagogy.

Outdoor education

Outdoor education can be a basis for ESD learning that encourages developing a sensitive engagement with the environment and/or learning about it (Bascopé et al., 2019). Many researchers (Samuelsson & Johansson, 2006; Nilson et al., 2018; Bascopé et al., 2019) have already spoken about the

importance of play in the learning experience as a process of creating meaning in the world. Outdoor practice permits students and instructors to make interdisciplinary links and connect with their immediate natural environment and local cultural identity while examining the environmental issues of their community (Yanniris & Garis, 2018). Concerning outdoor education, it is important to mention the work of environmental education centres that are presented to disseminate environmental education leading to projects and are associated with multiple benefits for students who participate (Yanniris, 2015).

Educational events

The research of Bechlivani and Pavlis-Korres (2022) shows that the participants of educational actions and programs about climate change in the Prefecture of Larissa, Greece, have developed environmental awareness with the help of educational events that offer experiential activities. Such activities contribute to the participants' better understanding of the climate change phenomenon, motivating them to become actively engaged and undertake initiatives that contribute to their environmental awareness development (Bechlivani & Pavlis-Korres, 2022).

Skanavis and Kounani (2018) give an example of such an event. The researchers clarify how climate change needs to be better communicated to young people in order to be tackled successfully in the future, taking the example of a summer camp in Skyros Island (Greece). They explain how camps are places where environmental consciousness could easily be supported and how such an activity can serve as an effective teaching tool for communicating climate change to children. Summer programmes can provide an ideal opportunity for environmental education in an interactive context (Larson, 2008).

Children as active actors

Children need to be considered active stakeholders in sustainability issues (Davies et al., 2009; Caiman & Lundegard, 2014; Sawitri, 2017) and be encouraged to become problem-seekers and solvers in their localities (Davies, 2009). Policies should promote school campuses to operate as living labs – places where students are involved in co-creating solutions and enacting them through real-life behaviour (Vaughter, 2016).

Encouraging learners to undertake transformative actions is also a major preoccupation for ESD. It is important to encourage individuals to undertake transformative activities for sustainability, which means a change of behaviour, attitude and lifestyle. At the same time, the contextual factors and institutional support provide an enabling environment and can bulwark individual contributions (UNESCO, 2020, p. 57).

Citizenship education

Bascopé et al. (2019) propose understanding education for sustainability as part of citizenship education, as the concept of citizenship can be a way to understand the magnitude and complexity of the changes needed. Citizenship as an interdisciplinary approach fostered by teachers from different backgrounds encourages students' capacity to act, think critically, and be transformative in their contexts. It also empowers future generations to think and act differently towards a better and more sustainable world. ESD must be understood as going beyond disciplines; it goes more to the fundamentals of cosmopolitan citizenship and how we interact with our contexts in everyday life (Hedefalk et al., 2015).

Capacities for educators

Petkou et al. (2021) explain that even if environmental literacy can lead to the manifestation of pro-environmental behaviour for children and adults (educators, parents, etc.) and environmental education is a crucial way to manage environmental problems, educators do not have the appropriate training on environmental topics to be able to support such programs. They investigated whether training triggers the implementation of environmental education programmes and possible metacognitive effects on educators. Significant deficiencies in the capacity building of educators and the organisation of environmental education in pre-primary and primary education negatively affect the implementation of environmental programmes in schools. Bascopé et al. (2019) propose a procedural framework for implementing teacher professional development opportunities in the area of sustainable development at an early stage. More particularly, the authors suggest a review with the scope to foster innovative teacher professional development opportunities to inspire teachers and inform policymakers.

Teachers can over-influence children's experiences by transmitting their ideas and emotions regarding their personal and cultural relationship with the environment, especially while using art to help them (Bascopé et al., 2019; Kefalaki, 2021). For Bascopé et al. (2019), art can also help as a booster of creativity and complex thinking. It can incorporate meaning with scientific inquiry, environmental action and community place-making. Through it, a sense of place and belonging can be developed by promoting an affective engagement with our surroundings. Spaces of artistic experimentation led by artists and teachers offer an excellent opportunity for children to develop a sensory engagement with the world (Bascopé et al., 2019).

Educators remain vital in facilitating learners' transition to sustainable ways of life. Their capacities must be built in UNESCO's (2020) priority action area 3. They need to be empowered and equipped with the knowledge, skills, values and behaviours to inform and empower learners to understand the complex choices that sustainable development requires. It is crucial to inform and sensitise all future educators, as they will play a decisive role in formulating both an attitude and a policy towards the

environment (Kyridis et al., 2015). This is why the institutes that educate future educators should target the sustainability attributes of their students and monitor changes, develop suitable research instruments, processes and statistical models, and link higher education to sustainability and global citizenship (Shephard et al., 2015). Emphasis should also be laid on students within the Faculties of Primary Education, with the purpose that they fully understand the principles of sustainability to be capable of teaching them effectively to their future students (Kyridis et al., 2005)

Yanniris's (2015) research with Greek teachers (a representative sample of 100 school units) explains what prevents Greek educators from undertaking environmental education projects: 3% do not find them necessary; 52% cite increased workload, 28% lack specialised training, and 7% are newly appointed. These responses reveal that environmental education could potentially expand if the teachers received more specialised training (Yanniris, 2015).

Teacher professional development and education on themes of sustainable development are essential for educators to initiate their students. Environmental students in Greece expressed their views on how to encourage environmental education within the educational process (Kyridis et al., 2015):

(1) Environmental education should be included in the curricula of primary schools as a subject in its own right.

(2) There should be a school handbook about environmental education issues to help students further.

(3) There should be a teacher's book with information about environmental issues and lesson plans.

(4) The application of environmental education projects changes the profile of the educational process overall.

(5) The teacher's role changes significantly during an environmental education project.

(6) Continuous teacher training on applying environmental education would be beneficial.

(7) The teachers themselves should evaluate environmental education projects.

Conclusion

The Greek educational system seems to have understood the importance of ESD integration in the educational process. Still, up to now, there has been little action to support and follow the cause. In this article, I examined the challenges and needs to foster sustainable development education in the educational curriculum, providing an ESD future and reinforcing global awareness of the challenges and needs to engage in a sustainable future. This article also includes specific proposals from which the government and stakeholders can be inspired on how to promote ESD best. Integrating sustainability and climate protection into a school's curriculum also means putting the theoretical framework into action, starting with stakeholders, educators, and young people who will apply what they learn in their everyday lives.

Enhancing the capacities of educators and integrating ESD into the curricula is essential to prepare future generations for a sustainable future. Additionally and most importantly, valid evaluations of sustainable education practices may lead to developing a sustainable future.

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