

Exploring the perceptions of primary education executives in Greece on the role of the modern school in promoting environmental and sustainability education

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Citation: Doulami, E., & Dimitriou, A. (2025). Exploring the perceptions of primary education executives in Greece on the role of the modern school in promoting environmental and sustainability education. *Interdisciplinary Journal of Environmental and Science Education*, 21(1), e2504. <https://doi.org/10.29333/ijese/15812>

ARTICLE INFO

Received: 19 Aug. 2024

Accepted: 03 Dec. 2024

ABSTRACT

The education for sustainability and the environment (ESE) is an evolution of the environmental education, as it integrates environment, society, economy and politics, while appealing for social cohesion, equality, justice, cultural transformation and change in the interaction of the individuals. A school that promotes ESE desires to combine teaching, administration–leadership, culture, and being “open” and “interacting” with its community. In this context, an attempt was made to explore the perceptions of primary education executives (PEE) about the characteristics that ESE may have, as well as the formulation of an “in-school,” internal educational policy focused on ESE. The present study attempted to explore the above issues through qualitative research, deriving information from the analysis of the speech of forty PEE. The results of the research have shown that major issues are teachers’ in service training, the formation of a collaborative culture and a school “open” in the community.

Keywords: education for the environment and the sustainability, sustainable school, education executives, active citizen

INTRODUCTION

From the 1990s and onwards, growing concern about the environment and development problems led to that educational approach whose main goal was not only to directly improve the environment, but also to enhance education for sustainability (ES) eventually. During this decade ES emerged as the successor of environmental education (EE) in particular through agenda 21 and the 1992 United Nations environment and development report (Cough, 2005, p. 342). The concept that now defines EE is sustainability, which simultaneously integrates the environment, society, economy and politics (Tilbury, 1995). The 2002 Johannesburg Conference consolidated sustainability as a central element of international politics. Equal ES could be considered as the “descendant” of EE (Reid, 2002, p. 74). In fact, as Flogaitis and Liarakou (2008) emphasize, “education for sustainable development (ESD) is the evolution of EE, since in it the old and the new coexist. However, ESD is something new, as well as the concept of sustainability.”

But what exactly is new? We can say that education for the environment and sustainability (EES) calls for social cohesion,

equality and justice, which require cultural change in people interaction. The “experience” of EE has shown that awareness and knowledge are not enough to bring change in behavior, as individuals need to have skills and to be inspired by values that support this knowledge and awareness (McKeown & Hopkins, 2005). Sustainability is, at last, a moral imperative in which cultural diversity and traditional knowledge must enjoy the required respect (Dimitriou, 2009, p. 92). We would like to emphasize, therefore, that ES, although it has a lot in common with the previous perceptions of the EE, as it includes goals of encouraging critical thinking, value analysis and active citizenship in terms of the environmental context, differs from it, as “primarily concerns the education and the ability to build skills and secondarily the solution of environmental problems” (Fien, 2001, p. 19). In this context, the ES suggests, provides solutions and proposes ways in which citizens can obtain the appropriate supplies that will enable them to shape a sustainable future (UNESCO, 2010).

Education for the Environment and the Sustainability in the Modern School

At the international level, the United Nations World Commission on Environment and Development (WCED, 1987)

has defined sustainable development (SD) as “development that meets the needs of the present without compromising the capacity of future generations to meet their own needs” (p. 43). This definition recognizes not only the importance of the environment but also the need of the world for development and therefore seeks to establish a balance between environment, society and economy (UNECE, 2005).

SD is the kind of development that promises to restore balance to the global system that includes the triptych environment-economy-society by including the three and seeking long-term improvement and maintenance of human quality of life. SD in order to achieve this requires a global revolution in the way citizens think and act. It requires the development of respect, critical and systemic thinking, participation and interest, the instillation of moral values as well as important skills such as problem-solving, reflection and evaluation (Kadji, 2013).

Sustainability has the potential to transform education and as countries and communities struggle to meet modern challenges accompanied by significant life-changing events, sustainability adds purpose to education and curricula, while offering a shared vision along with changes in curriculum content. ESD brings about changes in teaching and learning as it launches new pedagogies that encourage students to ask questions, analyze and think critically as well as make decisions that are more collaborative than competitive and more student-centered than teacher-centered (UNESCO, 2012, pp. 36-37). ESD pedagogical practices also include participatory learning and community learning, “outside the walls” of the classroom, as well as promotes learning of skills and values (UNESCO, 2017).

The characteristics that shape ES are holism, interdisciplinarity, clarification of values, critical thinking, multiple methods of approaching the educational process, participatory decision-making, critical approach and solving issues to be explored, orientation in finding solutions, integration in the daily life of learning experiences and policy that must be action-oriented (Dimitriou, 2009; Sauve, 1996). ESD also draws attention to two important and often interconnected processes: collaboration and dialogue, in order to maximize capacity and increase involvement in learning for SD (Tilbury, 2011).

An important point that we should point out in ES is also the connection of local action with global thinking and action that are facilitated through holistic approaches of the school (Shallcross et al., 2000). It is important for children to explore the motivations that govern choices and decisions about environmental issues, which may vary from person to person. As well as formulating questions and assumptions about the consequences of their own choices on the environment and their fellow human beings (Gómez & Depuig, 2003). How students learn to think about sustainability will also affect their actions as local and global citizens (Moore, 2005).

In the same way, sustainable school comes to give a new content to education, as it is associated with the creation of a new culture that is not just about adopting SD issues as an innovation in schools but comes to deepen the moral purpose of education, while giving it a new frame of reference. The sustainable school seeks to develop in students-citizens a

sense of personal responsibility, while providing them with the experiences and skills that will enable them to take an active role and act voluntarily to bring about change in all areas of social and political life (Zachariou et al., 2011).

Administration and Sustainable School

The implementation of EES in school practice requires educational, pedagogical and institutional changes that will allow schools to effectively integrate the principles of ESD. School principals in order to achieve such a transition need to be leaders who have a vision and are inspired by an imperative moral need and thought, which benefits society. According to Davies and Davies (2004, 2006), their role is crucial because as principals and in particular as leaders with prioritization skills can ideally turn strategy into action, align individuals and organizations accordingly and determine crucial points of intervention (Zachariou & Kadji-Beltran, 2009). In such a perspective, the way in which schools could develop sustainable ways of approaching and working is also very important.

Education, apart from being the place where children and students are educated and developed, apart from being the place where teaching, education and practice take place, is the most important factor of social and economic development of peoples. Its dynamics require the adaptation of its objectives to the current data of the economic and social environment. We should say that the days when a school was run by a lone principal-leader without the substantial involvement of the other teachers have passed (Lambert, 2002).

In Greece the educational reality may differ from those of other European countries, as the school unit is treated as the final recipient of the decisions for the implementation of the educational policy (Andreou & Papakonstantinou, 1994). But on the other hand, it is becoming increasingly accepted that changes and innovations in education could not proceed if they have not been understood at the level of the educational unit. It is therefore necessary for the educational unit to plan, evaluate, report, innovate and intervene in the formulation of educational policy as well as in the critical support of educational changes. It is also required that educational unit should have some margins of relative autonomy without depriving educational policy of its national character (Mavrogiorgos, 1999). Through this internal process, it is aimed an educational institution that is “open” and in “interaction” with its community in which its students, teachers and staff but also various social groups of the local community could not only acquire knowledge and experiences for the future but at the same time they could shape their living and working conditions in the present (Flogaitis et al., 2010).

According to Davies and Davies (2006), strategic leadership is a critical component for the effective development and the development of schools. Effective execution must include: a single vision, goals, work plan, participation, creation of working groups with common goal, continuous monitoring of progress, evaluation and feedback (Anthopoulou, 1999). According to Harris (2008), the effective leadership of a school that promotes EES must be “shared and participatory” and be inspired by a strong vision, high expectations, clear goals, determination and focus on teaching and learning.

Sustainable school is an innovation of the modern education system. It is, also, a new perspective and a field that remains unexplored in several aspects and dimensions (Flogaitis et al., 2010). However, its effectiveness depends on the degree of its connection with the local community. The immediate social environment is a “resource” that can highlight the school and “exploit” it as an aid to the project, along with resolving local environmental issues (Goethals et al., 2013).

This collaboration forms learning and practice communities through which people overcome inactivity. Such collaborative practices lead to the development of a common culture for sustainability in the community where schools function as social organizations that strengthen and maintain the reflexes of all participants towards sharing a common vision for the sustainability of their community, promotes intergenerational communication and interaction (Espinete & Zachariou, 2014).

Clarifying the Research Issue

The object of this research that based on the theoretical framework and the general reflection that developed briefly above was to select and to investigate the views and perceptions of the primary education executives (PEE), regarding issues that are listed above:

- What are the views of the PEE on the characteristics of EES?
- What are the views of the PEE regarding the educational planning or the exercise of an “internal” educational policy of their school unit in order for it to promote EES?

The selection of the above research questions was made after a thorough bibliographic review and based on the originality and potentially theoretical value and practical usefulness of the research. In the Greek and international literature, while the concept of sustainability has been discussed in depth, sustainable school is a concept under “formation.” Also, it emerged that the investigation of the views and perceptions of the PEE regarding the EES has not been recorded regarding the Greek school (Doulami, 2020).

METHODOLOGY

The above research questions were chosen to be approached through qualitative research in order to investigate in depth the issues to be studied and to collect qualitative information. The qualitative approach allows for deeper analysis and interpretation of situations, events and behaviors (Bird et al., 1999). It is also considered as the most appropriate to reveal the experiences, views and perceptions of the respondents (Tsourvakas, 1997) around the research questions that have been asked.

The present research attempts to investigate in depth the above research questions, drawing information through the analysis of the speech of the PEE of the Prefecture of Evros and the Prefecture of Rodopi, of the Educational Region of Eastern Macedonia and Thrace whose commitment to EES was not known or given. It was considered that the qualitative

approach was more appropriate than the quantitative one because it would be given the opportunity to those executives who may not have heard anything about sustainability education to speak and express their views (Chatzifotiou, 2002). While the researcher may ask for further clarification or rephrase, identify, clarify or summarize certain facts (Bird et al., 1999).

Furthermore, the qualitative approach put the subjects to be investigated at the center of the research and thus an attempt was made to study their perceptions and attitudes without prioritizing them by choosing closed or open answers. In other words, there were no ready-made hypotheses or questions that asked for verification or rejection, since the purpose of the research was to reach conclusions that would emerge from the views of the executives. The research technique used to record the perceptions of the PEE was the personal interview which, however, was sampling and with the aim of deeper analysis and interpretation of situations and behaviors. The interview can be used as the main means of gathering information that is directly related to the subject of the research as well as it can be used to test hypotheses or suggest new ones or as an interpretive tool that helps to identify variables and relationships (Cohen & Manion, 1997, p. 374).

Data Collection Tool

During the planning of the interview, the axes and the research criteria were designed and compiled for the detection of the perceptions and views of the PEE. The research questions and the objectives of the research were the axes of investigation while the individual criteria of the investigation were defined, and which specify and analyze the axes in measurable data. The following axes, criteria and questions were asked for the specific research questions mentioned earlier:

- **AXIS 3:** Investigation of the perceptions and attitudes of the PEE regarding education for the environment and sustainability.
 - **Criterion 3:** Perceptions of PEE about EES.
 - **Question:**
 1. In modern education, EES is sought. How do you imagine this education? What characteristics could you give it?
- **AXIS 4:** Investigation of the perceptions of the PEE regarding the administration of a sustainable school.
 - **Criterion 7:** Perceptions of PEE regarding educational planning and the exercise of “internal” educational policy.
 - **Question:**
 1. As a principal of a school unit or as a primary education officer, if you were formulating an educational planning or formulating an “internal” educational policy, where would you pay attention and what axes would you suggest in order to promote EES?

The target population of the research was the PEE of the Region of Eastern Macedonia and Thrace. The sample of the research consisted of 40 PEE and special education of the

Prefectures of Evros and Rodopi, of the Region of Eastern Macedonia and Thrace. In particular, the sample is composed of the regional director of education, teachers, and kindergarten teachers pedagogical guidance counselors, the school counselor of minority schools, the head of school programs of primary education of Evros Prefecture, the head of educational affairs and later deputy head of primary education of Evros Prefecture. Principals and deputy principals of primary schools of urban, non-urban areas and minority education, heads of kindergartens of urban, non-urban areas and minority education, principal of special primary school and head of special kindergarten as well as a member of Supervisory Scientific Council of the experimental primary school of Alexandroupolis, in order to represent all the main areas where the executives of primary education work (Doulami, 2020).

RESULTS

In qualitative research, after the collection of research data, the next step is their processing. Coding has been defined by Kerlinger as the transfer of the answers to the questions and the information of the respondents to specific categories in order to carry out their analysis (Cohen & Manion, 1997). The process of editing the material of the interviews that was followed included the transcription of the interviews, their conversion into a written speech-text which we then processed with the method of content analysis. It is a method of analyzing the speech of the respondents which is considered the most appropriate to analyze information of written evidence, ie “for the search and evaluation of messages in the printed word, especially when it comes to issues of opinion.” The content analysis was based on the categorization process which allows us to convert the verbal content of the interviews into concise findings which are then interpreted in qualitative terms. Finally, the data are analyzed and interpreted in the light of research objectives (Cohen & Manion, 1997).

Regarding the *first research question*, how do the executives imagine and what characteristics do they give to ES, the research subjects propose as the first characteristic, in relation to the frequency of reference in their speech, the methodological tools of EES. They therefore propose the implementation of educational programs, experiential projects and actions of short or long duration. An education officer characteristically points out: “The Ministry should record the overall picture of those involved in EES, so that it can then propose actions of short or long duration, in order to overturn some perceptions and create new ones.”

As a second characteristic of ES, from its frequency of reference in the speech of the education executives, the executives refer to the proposed teaching strategies as well as to the working methods of the EES. They therefore report the experiential approach and learning along with collaborative teaching and in combination with the active participation of students. An education executive emphasizes: “Experiential mainly because theory alone does not help. If we do not experience it on our own, if we do not actively participate, we cannot embrace it ...”

As a third characteristic of ES, the education executives highlight the organized and experiential training which should precede the implementation of programs and actions related to EES and should be provided both to teachers in order to implement it in schools and to students and parents. In this way, the education executives typically state that they will “gain a full understanding” of the concept of sustainability since as the education executive emphasizes: “If the staff is not trained, how will we train the students?” The executives also points out that training should not only have a theoretical orientation but must be practical and experiential with a parallel presentation of good practices, activities and actions that have already been implemented.

As a fourth characteristic of EES, the executives propose the application of daily experiential practices in the school which will be a practical application of EES. In particular, an education officer claims that “by applying daily practices at school, the children adopt the good practice and” transfer “it even to their home, to their families. Thus, the students gradually change gradually their behavior at the same time the whole family attitude changes.”

As a fifth characteristic of ES, the subjects of the research emphasize the “opening” of the school to the local community and the cooperation with the local institutions. Especially, cooperation with the local institutions is one of the main axes of the EES not only for providing any form of resources or the provision of know-how and knowledge but also for a fruitful cooperation in order to participate in common programs and projects and furthermore for the dissemination of good practices by the school in a collective process of lifelong learning and exchange.

As a sixth characteristic of EES, the education executives underline that EES should be a central choice of the Greek curriculum so that with a clear goal to be “integrated” into Greek education. This option will provide degrees of autonomy to the teacher to take initiatives so that he can “escape” from the narrow context of the curriculum, and they would have the appropriate time to implement this kind of program. Furthermore, with the same frequency in the speech of the education executives is recorded the need for close contact and cooperation with the Association of Parents and Guardians.

As a seventh characteristic of EES, the education executives mention the interdisciplinarity which should “permeates” the programs and the experiential actions that are implemented in the context of EES. As an education officer points out: “Innovation is not promoted by fragmentation, innovation is promoted by focusing on an issue that you will “approach” from all sides that you consider to be innovative such as sustainability.”

As an eighth characteristic of EES, the education executives emphasize the orientation of knowledge in environmental, social and cultural issues and especially in the cultivation of values.

As a ninth characteristic of EES, the education executives argue that it should be field research and field study as they support those on-site visits and excursion to the study area, “outside the school walls” while they have great importance since as they claim, theoretical knowledge is not enough, if it is not accompanied by experiential learning.

Table 1. Characteristics of EES

	Characteristics of EES	RER
1	Implementation of programs, experiential work plans (projects), and actions of short or long duration	20
2	Working methods: Experiential approach and learning, collaborative teaching, and active student participation	17
3	Organized and experiential training of teachers and students	15
4	Implementation of daily sustainable practices	11
5	Collaboration with institutions–"Opening" of the school in the local community	8
6	Clear targeting in curricula–Central planning by the state	7
7	Cooperation with the Association of Parents and Guardians	7
8	Cross-curricular approach of the object to be investigated	6
9	Orientation of the knowledge on environmental, social and cultural issues, and the cultivation of values	5
10	Field study, excursions, and field visits	5
11	Support of the teacher in order to take initiatives	3
12	Rewarding and disseminating actions	3
13	Holistic approaches through coordinated school actions	3
14	Financial support of the corresponding programs	2
15	Support of the logistical infrastructure and provision of appropriate material	2
16	Autonomy of the school unit for taking actions	1

Note. RER: References to executive responses

As a tenth characteristic of EES, education executives point out the freedom that should be given to the teacher to take the appropriate actions as well as rewarding and disseminating successful actions and programs in order to be good practices for the educational community while at the same time they could act as "multipliers" in enhancing existing knowledge in the field and could provide multiple benefits to the local community.

As an eleventh characteristic of EES, the education executives argue that the holistic approach should characterize any action or program concerning the EES so that by focusing on an interdisciplinary issue and through many objects students can examine and explore a topic from many "perspectives."

As a twelfth characteristic of education for EES, education executives emphasize the provision of incentives to teachers and the consequent financial support of the school programs that concerning EES. Also, the education executives propose that the state should support the schools with material and technical infrastructure, printed or else, which would highlight and support EES.

Finally, as the last characteristic of EES, as it results from the frequency of its reference to the speech of the education executives, an education executive states that the autonomy of the school unit should be necessary as it is very important to decide according to their needs and to implement relevant programs or actions in connection with the future and in cooperation with all the stakeholders of the school unit, teachers, students, parents and local community organizations.

Subsequently, in **Table 1**, we could present schematically the above answers of the education executives referring to the characteristics of EES. In particular, **Table 1** was formed from the references of the terms in the speech of the subjects to be investigated, as follows.

A second research question that was asked to the education executives was to mention the axes they propose during the formulation of an educational planning or in the formulation of an "internal" educational policy concerning EES. We could mention that the education executives suggest:

1. The education and training of the teachers at their school so that they are aware of environmental issues as well as cultural, social and humanitarian in order to organize and promote actions related to EA.
2. The education and training of the parents and other members of the local community, so that the benefits are multiple, while at the same time it will be possible to create a collaborative culture within a well-functioning relationship.
3. The promotion of research learning and the enrichment of teaching with simple experiments, field visits and through the promotion of experiential learning with the parallel contribution of arts, theater and music.
4. The formation of a collaborative culture both in terms of in-school cooperation and the activation of all stakeholders of the educational unit (teachers, students, and parents) as well as between the educational organization and other school units or the local community.
5. The promotion of the respect of cultural diversity and in general the promotion of equality and democracy among all stakeholders in the educational community.
6. The elaboration of a work plan with the participation and synergy of all school stakeholders to monitor and improve the indicators that will be demonstrated in the plan and will promise a sustainable perspective and culture in all areas of the educational organization. Some training executives even suggest the creation of work groups (mainly teachers) that will organize, coordinate, distribute and direct the project in order to achieve the desired achievements.
7. The creation of a joint council where all stakeholders will discuss, propose, exchange views, and work together in order to "build" a sustainable school.
8. The improvement of the building and material infrastructure and the configuration of the outer courtyard so that the building becomes less energy consuming and "able" to "integrate" practices that promote experiential learning.

9. The promotion of innovative practices, such as the selection and use of multiple books based on the curriculum or the utilization of the institution of the mentor, as typically stated by an education executive.

In fact, the training executives suggest that all actions be preceded by a self-evaluation process that would cover all the parameters that should be set for improvement. This process could demonstrate either the infrastructure or actions or collaborative and organizational issues, in order to take action that would lead to the desired results.

We conclude from the above that when the educational practice is oriented towards the “shaping” of an internal educational policy with a clear goal always in the context of a central planning that “embraces” and helps to achieve the goals set for sustainability, we can work cooperatively for a more substantial change in consciousness that can “reconcile” people with the environment. Shallcross et al. (2000) also emphasize that the school that adopts as a central process, the continuous professional development of the people who constitute it, benefits both the students, the teachers and the rest of the staff as well as the parents, the school association, the school council and indirectly the state itself. Education, therefore, requires “reinvention” and “repositioning” in such a way that it can assume the responsibility required by today’s challenges and at the same time presupposes the development of the educational organization, in order to achieve this transformational change that is deemed necessary to achieved (Sterling, 2016).

CONCLUSIONS, DISCUSSION, AND LIMITATIONS OF THE RESEARCH

Regarding the first question of this research, which concerns how the education executives imagine EES and with what characteristics they could “define” it, the education executives clarify as key characteristics of the EES the elaboration of experiential-discovery educational programs with the parallel application of sustainable practices at school as well as visits to the field of study. Regarding the content of knowledge, the education executives emphasize the orientation of knowledge around environmental, social and cultural issues and especially in the cultivation of values through an interdisciplinary-holistic perspective, avoiding fragmentation, so that by focusing on an issue, the child can examine the subject from many “perspectives.” According to the research of Tsaliki et al. (2004), which was conducted on children aged 4-10 years, they point out that school is a strong factor in transmitting environmental knowledge and through them the children’s positive attitudes can become even stronger if we can apply them with the appropriate educational interventions. While the research of Psalida and Pyrovetsi (2005) showed that the implementation of specially designed environmental programs contributes to increasing knowledge and shaping positive attitudes.

As equally important structural element the education executives highlight the organized, experiential training that should precede the implementation of programs and actions related to EES and which should be provided to both teachers

and students and the parents. Additionally, research conducted on primary school teachers demonstrates the need for properly designed training and education programs for teachers to acquire knowledge and skills so that they are able to decide on their own environmental choices (Dimitriou, 2005; Dimitriou & Zachariadou, 2005). According to Daskolia’s (2017) research work (as cited in Flogaiti & Georgopoulos, 2012), she underlines the desire and the need that teachers had in order to obtain knowledge related to EE. Regarding the training needs of teachers, the first place seemed to be occupied by their needs in relation to the knowledge of the relevant issues and the conduct of the procedures concerning the didactic application and evaluation of the EE. Personal involvement, educational credibility, intention, functionality and self-efficacy are essential skills and abilities of teachers as well as key criteria for upgrading teacher training programs (Van Petegem et al., 2005). Training is an integral part of the continuous professional and personal development and evolution of teachers, which takes place in the context and in direct relation to the overall development and evolution of the educational system. According to Eaker et al. (2002) when the educational institution itself is oriented to function as a learning community, the professional development of teachers should take place in the context of the overall reconstruction of the school. As pointed out, after all, the operation of learning communities is the greatest hope for the change of school culture in many directions and at multiple levels (Flogaitis et al., 2010).

Another key feature of EES, education executives emphasize the “opening” of the school to the local community as well as cooperation with local agencies. Cooperation with the institutions is one of the main axes of the EES not only in terms of providing any form of resources but also in terms of promoting joint programs, providing know-how and knowledge as well as dissemination by the school of good practices in a collective process of lifelong learning and exchange. According to Uzell et al. (1995), this process seeks to develop a bond between the school and the community on the basis of which people can be actively and effectively involved in order to achieve a better quality of life in the particular context in which they live. This collaboration forms learning and practice communities through which people overcome inactivity. What is important in school-community cooperation for SD is that all participants work with the idea that improving their community will lead to an equivalent improvement in their quality of life and that this can only be possible through a collective effort. Also, such collaborations lead to the development of a common culture for sustainability in the community while the schools function as social organizations that strengthen and maintain the reflexes of all participants towards sharing a common vision for the sustainability of their community and at the same time they promote intergenerational communication and interaction (Espinete & Zachariou, 2014).

In addition, information and cooperation with parents and in particular with the Association of Parents and Guardians is considered essential in order to help and enrich the work performed by the school. Research has shown that the family and school environment can raise children’s awareness of environmental issues (Gousia-Rizou & Sdrali, 2005). In

particular, the importance of parental involvement in environmental action programs is an essential component of EES, in terms of its social and pedagogical aspirations since this demonstrated by research. Through this procedure is enhanced the use of interactive, collaborative and group-based teaching methods interest of students and parents and is facilitated the creation of interactive, participatory communication networks for the collective response to problematic situations of the local environment and the formation of sustainable conditions in it (Zachariou et al., 2005).

The education executives also emphasize that EES should be a central choice of the Ministry of Education and the curricula, in order to be “integrated” in Greek education with a clear goal. At this point we observe the following paradox: in 2011, within the framework of the “new school” and under the responsibility of the Pedagogical Institute (2011), a guide for the implementation of EES in the curriculum was prepared, which contains instructions of the teaching field for the “environment and education for sustainable development,” for both primary and secondary education. It is obvious, from the speech of the education executives, that the content of this guide wasn’t known to the education executives of this research. It is also obvious that the education system still needs to develop the necessary structure and infrastructure to support the project in order to “reach” the majority of teachers.

Finally, the education executives emphasize that the state must “take action” to provide incentives, financial or otherwise, to teachers and schools in order to implement and support relevant programs or actions as well as to support school unit’s building and logistics infrastructure.

According to the basic theoretical assumptions, the sustainable school proposes the basic principles for the operation of a school community in the direction of EES and refers to a dynamic learning organization which works as a whole to process, improve and change its culture (Katsenou, 2012). In order for education to be able to make a real contribution, it would be desirable to redefine its purpose by formulating a policy that will have a positive impact on the process for a more sustainable world.

Education, therefore, needs to be significantly transformed. We would like a change in educational thinking, policy and practice that creates deep and transformative learning on the part of the individual and the community as well as relevance and practical ability to challenge and enforce changes for global prosperity. Or as Heila Sisitka argues, education ought to be humanitarian, interactive and consultative, incorporating creativity and imagination focused on action and in relationship to collective social learning, which can break the rule (Sterling, 2016).

Regarding the second research question, the education executives propose the axes, and they point out the formulation of an educational planning or the formulation of an “internal” educational policy of the school unit regarding the EES. In the context of this question, the education executives emphasize with their speech the training of the teachers as well as of the parents of their school unit, the formation of a cooperative culture, the “opening of the school”

in the community, the elaboration of educational programs of experiential-discovery learning with an interdisciplinary approach to the issues to be studied as well as the improvement of the building and material infrastructure of the school buildings with the respective configuration of the courtyard.

A study conducted in Cyprus on exploration of the factors that promote EE in schools noted that principals are the most important parameter for the successful integration of EE in schools (Kadji-Beltran, 2002). A school that has the support of the principal for the promotion of EE will achieve a significant level of “integration” (Zachariou & Kadji-Beltran, 2009). According to Jensen (2005), sustainable school requires a “holistic, school-based approach” as it may treated as a system that includes teaching, education, leadership, culture and cooperation. The central goal of EES becomes the formation of autonomous and active citizens. To achieve this essential goal, important components for the development of curricula covering all aspects of school life. So should be considered: the pedagogical framework that it may refers to the basic approaches to teaching and learning, the general organization of the school and the social climate that should create in the school and finally the technical-economic component that concerns the infrastructure (Kadji, 2011).

Also, it is essential for continuous professional development of all school staff towards a sustainable education and practice (Zachariou & Kadji-Beltran, 2009). In fact, if we consider the challenges that the teacher is called to encounter in terms of the effective approach of EES, they require them to reconsider their own role in the light of different perspectives. The aim in this case should be for the teachers to move from the stage of theory to practice. This implies the acquisition by the teachers of the skills that would enable them to translate into practice what they teach. In particular, in relation to EES, teacher education, according to UNESCO-UNEP, is characterized as a “priority of priorities.” It is crucial to reorient education and training systems in the new practice of EES in order to disseminate to civil society the understanding, critical analysis and support for SD (Zachariou, 2013).

As Katzi (2013) emphasizes, the process of providing quality education in relation to EES requires the revision of the content and the structure of the curricula and the pursuit of an interdisciplinary understanding of social, economic and environmental sustainability. We should also reconsider the pedagogical strategies and teaching, learning and assessment methods employed in EES. The whole process aims at developing skills of self-education, creative and critical thinking, communication, collaboration, conflict management, problem solving, decision making and action planning, citizenship and the use of new technologies (p. 23).

School principals are therefore “called” to meet an important challenge: to translate EES vision in schools through action. Their main goal should be not its partial and superficial application in school but the awakening and inspiration of all participants in the educational process so that the adoption of practices should be a result of externalizing the need of participants to orient actions and their attitudes towards SD (Zachariou et al., 2011).

Last but not least, we should emphasize that the conclusions of this research paper are not objective data or definitive conclusions, as this research effort concerns a sample of the total population of PEE of the Region of Eastern Macedonia and Thrace. It could, therefore, be considered as a way of approaching and reading the current reality in the area of inquiry and in the light of the answers of the specific sample as well as it could be a trigger for further investigation of the issue by those researchers or educators dealing with similar questions, issues or concerns, especially if they wish to participate in a relevant research process.

Author notes: The research was conducted as part of a doctoral thesis at the Democritus University of Thrace, Department of Early Childhood Education, Alexandroupolis, Greece by Evgenia Doulami, while Anastasia Demetriou undertook the supervision as Professor in charge of the Democritus University.

Author contributions: The authors contributed equally in the article. Both authors agreed with the results and conclusions.

Funding: No funding source is reported for this study.

Ethical statement: The authors stated that the research was conducted in accordance with the principles embodied in the Declaration of Helsinki and in accordance with local legislative requirements. All participants gave informed consent to participate in the context of the implementation of this study.

Declaration of interest: No conflict of interest is declared by the authors.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

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